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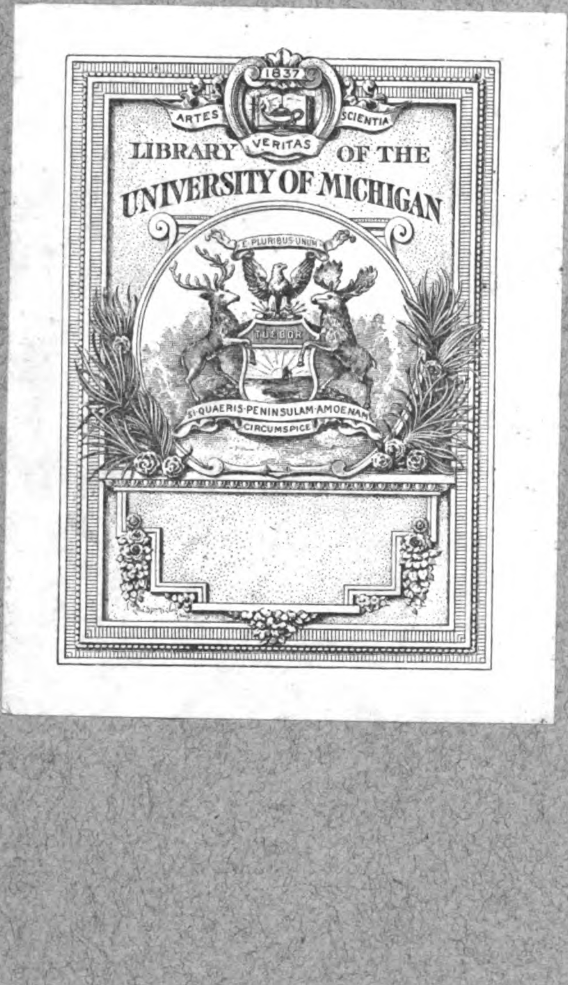
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The Cavendish Lecture
ON
INFLAMMATION OF THE VERMIFORM APPENDIX.

⁂ *Abstract of Lecture delivered before the West London Medico-Chirurgical Society, at the Town Hall, Hammersmith, on June 20th, 1902,*

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IF we remember that this is the commonest acute malady met with in the abdomen, excepting possibly the complications of hernia, it is really astounding that twenty years ago this affection was unknown. It was not until the year 1886 that the very name itself had any existence. I need not say that under no circumstances is appendicitis to be regarded as a new disease. The disease is not new, but newly-discovered: it has been hidden for centuries under a lot of vague clinical facts and medical verbiage.

The point that should be first insisted upon in connection with this malady is this: it is a pure peritonitis. It is very desirable, therefore, that in speaking of this affection we speak of a definite form of peritonitis, and the features and complications and possibilities of the malady and the treatment to a certain extent are simply those of peritonitis. Appendicitis is an inflammatory trouble due to certain micro-organisms, and it begins as a catarrh, excepting cases of actual torsion. I do not propose to say anything in detail as to the causes, or reputed causes, of this malady. We know it is most common in young people, 80 per cent. of the cases coming under the age of thirty years, and, curiously enough, 73 per cent. occuring in males.

I should like to draw attention to certain factors in the cause of appendicitis which I think have a good deal to do with the treatment of the disease. The first factor is the extraordinary effect of a tropical or sub-tropical climate. I think therefore that no person should be allowed to go to a tropical country if he is a suspected subject of trouble in the appendix. It is very noteworthy how persons who have had a little suspicion of this malady in themselves will come to an acute termination of it after having gone to reside in a tropical or sub-tropical climate. Another curious point is the frequent coincidence in the female subject of an attack of appendicitis with the menstrual period. It cannot be an accident, because in one particular case that I had the attack occurred on the fourth or fifth day and never varied from that. One might say that out of nine or ten attacks in females perhaps as many as four or five will be associated with the menstrual period.

The last point in this connection is one that I am sure will be at once agreed to by everybody in this room, and it is this. If there is one solitary factor in the production of appendicitis which is overwhelming it is a loaded cæcum. Nothing plays, I think, so important a part in the prophylactic treatment of appendicitis as the recognition of the fact that if the cæcum can be kept free from indigestible food and undigested food the risk of attack is very much minimised.

With regard to clinical matters, I want to deal with the so-called McBurney's point. Tenderness at this magic spot has become a sort of talisman. The hand of the experienced man is put on the spot and there is tenderness and the patient has got appendicitis. It is said to be always present in every case of appendicitis, it is said to be not present in other troubles met with in the abdomen. It is said to indicate the seat of the disease, it is said by some to indicate the position of the diseased appendix. It is said by others who are more cautious—by McBurney to wit—that it actually indicates the precise base of the appendix. The construction that I would venture to put upon it is this. There is a certain tenderness in the right iliac fossa in appendicitis and McBurney's spot corresponds roughly to the centre of the right iliac fossa and therefore it is reasonably the place where tenderness is exhibited. Next, it is a symptom quite common in other maladies, most notably in colitis. In the next place I should say that it is a feature exceedingly common in perfectly healthy individuals in a quite normal state. Last of all, it does not indicate the situation of the disease and it does not indicate, which McBurney insists that it does, the situation of the base of the appendix. Any man operating and cutting through the situation at this point will know perfectly well that there may be tenderness there, and the base of the appendix does not correspond to that spot. Feeling that it was a matter that needed investigation, I asked Dr. A. Keith if he would carry on investigations on certain lines that I indicated, and I am deeply indebted to him for the admirable manner in which these investigations were carried out. What struck me was this. So many persons are tender at certain points in the right iliac fossa, and very often acutely tender. But there is no such point on the left side, and there must be something, therefore, anatomically different there. What is it? The ureter or what? This is how the facts come out. Sections were made along the spino-umbilical line; that line measures in the normal male adult six inches and it crosses the rectus muscle at the anatomical point known as Munro's point, and it roughly corresponds there to McBurney's point. Well, now, the ureter has nothing to do with Munro's point, because it does not cross the line there. Exactly the same condition exists on the left side, so that nothing is to be learnt from that. The next thing is this. The structure that exactly comes beneath that point is the ileo-cæcal valve. The tender thing that can be discovered in the body of a healthy person at that spot is the ileo-cæcal valve. As you know, all orifices are peculiarly well supplied with nerve fibres and are peculiarly sensitive, such as the sphincter of the anus, the orifice of the pylorus, and other sphincter-like openings. That that is the cause of the tenderness in that particular spot admits of no dispute. The base of the appendix, you will be surprised to hear, is one inch below McBurney's point, as discovered in fifty bodies prepared by formalin. Dr. Keith was good enough to examine the bodies of twenty-seven living medical students with this result:—in eleven the point of tenderness was exactly on the point; in nine it was a little above the point; and in four it was a little below the point. Those data pretty nearly correspond *pro rata* with the condition found in fifty hardened bodies by formalin. Moreover, in only three out of twenty-seven students was there any particularly tender spot in the right iliac fossa; in none was there any tenderness discovered on the left side of the body. That, I think, should render definite the circumstances about McBurney's point and the part it plays in this trouble. Any medical man present who has examined in detail cases of colitis will well know the extraordinary tenderness there is often discovered and maintained at McBurney's point.

I want at this stage to say one word about phantom appendix—an appendix described as vertical, of the size of your little finger, and sometimes lying obliquely. That appendix is a phantom and it is a curious phantom. The vertical appendix is due to constriction of the uppermost fibres of the rectus muscle that can be often excited by stimulating the nerve as it enters the muscle. I need not remind you that the appendix, the cæcum, the peritoneum surrounding them, and the muscles of the abdomen which cover them and the skin which covers these muscles, are all supplied by one nerve, in the main the eleventh dorsal. Even when the patient is under anæsthesia a little hard pressure in that spot where the nerve enters the rectus muscle will bring out this vertical appendix.

Now for the operative treatment of this trouble, and first as to the general death-rate from appendicitis. Of course, hospital cases are cases of certain gravity, and in those cases the death-rate is estimated at something like 15 per cent. But take ten medical men who have practised in a large town for, say, twenty years, and therefore must have had to deal with a great many cases of appendicitis. What number have they lost in that period? They would be shocked at the suggestion that they had lost 15 per cent. It is impossible, therefore, to get quite at the figure. But records have been obtained casually from practitioners and also from the German army in time of peace. It is curious that in both these instances the figure comes out at 5 per cent. I know that this figure is open to dispute, but still I do not think that out of 100 cases of appendicitis I have lost more than five in the course of my private practice. I think, therefore, that 5 per cent. may be accepted as the general rate of mortality in appendicitis. When one goes further into the question of operative treatment of appendicitis the whole crux is, What is to be done during an acute attack? There are certain men whose opinions must be listened to who assert that you must operate in every case of appendicitis as soon as the diagnosis is made. I know that that is not perhaps quite the common position taken up by surgeons in this country, but, as you know, it is almost universal—at least, in America. An operation, they say, should be carried out as soon as the diagnosis is made—not on the second, third, fourth, or fifth day. There are others who operate only on compulsion; they say, "No, the majority of the patients get well," and they only operate in exceedingly acute cases in which pus is evident or in cases that are really spun out and going to such a length that they feel there must be some condition within the iliac fossa which can only be reached by operation. Those are the two sides of it.

Speaking from no other than the very uncertain basis of one's own experience, I would take the opportunity of submitting these isolated points to your consideration, believing that they form the basis upon which something like a sound opinion can be arrived at. First of all there are advocates of what may be called indiscriminate operation. They use terms of this sort—"You must operate; the appendix is ruptured; there is perforation; there is acute peritonitis; there is gangrene." And mark—and this is the point that I want to draw attention to—these expressions are used exactly in the same sense as you use such expressions as "There is perforation of the bowel; there is a perforating ulcer in the stomach; there is gangrene or hernia of the intestine." And so they say an operation must be carried out even before a reasonable diagnosis has been made, as soon as an attack is suspected. What I very seriously object to is this: that the two things are put in the same category. It is an absolutely false analogy and distinctly misleading. Is it for one moment reasonable to put perforation of the appendix in the same category with perforation of the stomach? It is monstrous. Not only can a perforation of a fair size occur in the appendix, but a fair degree of gangrene may be met with without causing serious symptoms. I have found a concretion lying outside the appendix one month after an attack, when all the symptoms have subsided and without a single drop of pus. That must have been due to rupture of the appendix or perforation of the appendix or, if you like, gangrene of the appendix. Is it very reasonable, therefore, to use those terms in the same sense as you use the term rupture of the bowel, gangrene of the ileum, or perforation of the stomach? The analogy is absolutely unjustifiable. The second fact that I do not think can be pressed too strongly is this. The very great majority of all cases of appendicitis get well spontaneously. The third fact, which I think should be emphasised as strongly as the last one, is this: operation during an acute attack of appendicitis is attended with great risk to life. What that risk is we again have great difficulty in expressing in figures because they are not easy to get hold of. But we must take things as they are, and I have been at infinite pains to go through records by hundreds and the death-rate in cases of operation—I do not say what operation—during an acute attack comes out at about 20 per cent. Some of the hospital records come out higher than that. The fourth point is a little by the way. Relapses may occur after an operation carried out during an acute attack and that is a thing which must not be quite pooh-poohed. The last thing which I should like to impress upon your memories in very large letters, so to speak, is that the removal of the appendix during the quiescent period is attended with infinitely small risk.

If these facts are accepted, then I think the line of treatment is not difficult to establish and may be pretty clearly defined. Acting upon what one believes to be the best information that the records at present provide in the various directions that I have indicated, I think one comes to some such conclusion as this: All that we know of the pathology of inflammation of the appendix is positively opposite to the teaching that operation should be carried out the moment the diagnosis is made. I think that that cannot be put too strongly. We know a good deal about the pathology of this trouble, and I think that what we do know will not support the dictum that as soon as the diagnosis is made operation should be carried out. The second point is this. An immediate operation should be carried out in all the ultra-acute cases. It is often said that you cannot diagnose them. I would venture to controvert that statement. I believe all these cases are easily recognised, although there are two perfectly distinct types of these ultra-acute cases. There are some in which the local manifestations are not very striking and where the overwhelming symptom is that the patient has introduced into his system a gigantic dose of poison, with a temperature of 104° or 105° F., with the pain not very striking. Those are cases of septicæmia of the most intense character and the patient dies, perhaps, within thirty-six or forty-eight hours. In such cases the operation will probably do no good, but it can do no possible harm, and it should be as a matter of positive routine carried out. The second class of acute cases also cannot be mistaken. It is exactly parallel to perforation of the stomach, and I do not think anyone can have any difficulty in recognising the acute peritonism. The ultra-acute cases cannot be operated upon too soon. The third proposition, which I hope also will meet with your approval, is this: an immediate operation should be carried out as soon as there is any suspicion of pus. I suppose that will be universally accepted. I do not want a demonstration of pus, but a reasonable suspicion of it.

If those three propositions are accepted that takes us a long way. What, then, with regard to the residue of these cases which represents the great mass of cases of appendicitis? I have excluded all the ultra-acute cases and I have excluded those cases in which there is pus, and I think that in the cases that remain it is seldom imperative that an operation should be discussed until about the fifth day. I think that you will agree with me that in a case of appendicitis, if the temperature comes down and is getting towards normal about the fifth day your anxiety is becoming comparatively slight. And because the temperature keeps up after that day the case is not necessarily doomed, though very probably it will have to be dealt with. Having excluded the cases that I have mentioned I think that the phenomena associated with this malady will bear out that somewhat moderate suggestion in the matter of practice that the surgeon should hold his hand until some such time as the fifth day has been reached, when the requirements of the case will have been made quite manifest. Another matter that I will trouble you with is with regard to operative treatment carried out during the quiescent period. It so happened that in a paper which I read before the Royal Medical and Chirurgical Society in 1887 I ventured to suggest that appendicitis when relapsing should be treated by removal of the appendix during the quiescent period. Looking back on the discussion which followed that paper it is curious to note how very feebly it was received, and how the method advocated therein was scarcely accepted at all as a reasonable method of treatment. In that particular discussion one physician of considerable experience said that in the whole of his life he had never seen a case of typhlitis that could possibly have called for surgical interference of any sort. So that the reception of that paper was one which, I must confess, condemned me very much. Still, I do not think one has any reason to complain of the infrequency with which the operation is carried out at the present day. I have since that particular date removed the appendix during the quiescent period over 1,000 times, and out of that number I have lost two patients. I could without being very Jesuitical exclude one of those cases, because it was not primarily a case of appendicitis, but where there was a mass in the right iliac fossa, and where as a result the appendix was concerned. But I will acknowledge the two deaths.

The next point that I want to ask you to consider is this, and it is a difficult matter in practice: When should this operation be carried out? A patient comes to you and says, "I have had one attack," and you might almost tell him that the operation is so trifling that he should have the suspected organ removed. But the whole question is summed up in this: What is the probability of relapse? It is a curious thing that the percentage of relapses has greatly gone up. At one time there were said to be very few relapses—from 20 to 30 per cent. I am quite certain that it is safe to say nowadays that the great majority will relapse. Therefore I think it could be put down, as a line to guide one in directing this matter, that it is desirable to remove the appendix after the first definite attack. The line of argument is this. In the majority of cases there will be a relapse and the patient must feel that the weight of figures is against him. Secondly, the risk of the operation is really almost infinitesimal and will in time become quite trivial. There is just this little sort of comment to be made on a bold assertion of that kind. If there has been an abscess in the first attack then I think an operation may be put out of court altogether because that abscess will in certainly 95 per cent. of the cases obliterate the organ and render it harmless.

Well, then, I have been frequently asked this question: What has been your experience of cases that do not relapse? Going back as I can now over some years, and having seen some thousands of cases of appendicitis, I have seen a great many patients who have had only one attack and having known their career for a number of years, I have come to the conclusion that single attacks may have been due to gross dietetic errors, and may never recur unless those errors are repeated.

With regard to chronic appendicitis I think that in every such case the appendix should be removed when there is no other treatment for it.

Last of all I must say this: The removal of the appendix is not a panacea for every ill in the lower part of the abdomen, because there is apparently an impression abroad in the present day that any kind of disturbance below the umbilicus must of necessity involve the removal of this very much discussed organ.

THE FUNDAMENTAL PRINCIPLES
OF A
RATIONAL DIABETIC DIET.

By Dr. RUDOLF KOLISCH,
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The treatment of diabetes comprises two principal objects, viz., to maintain the strength of the patient by adequate nutrition and to increase his toleration for carbohydrates.

The importance of providing for adequate nutrition in diabetes is evident in view of the emaciation which is almost invariably associated with the disease. We have, however, to decide whether the emaciation of diabetic patients and the consequent debility are the direct result of digestive disturbances, or are present merely as complications, or whether they are due to an inappropriate dietary. In other words, does a diabetic patient necessarily lose flesh when he is given a sufficient quantity of nourishing food; that is to say, in quantities corresponding to the requirements of the normal healthy individual? The observations of Mering, Vort, Noorden seem to show that this is not the case. Weintrand and Pautz state that a person suffering from diabetes can subsist on a diet not exceeding that of the healthy individual. One of Weinirand's diabetic patients, who was given a diet corresponding to twenty-five calories per kilogramme per day, not only maintained his weight but actually put on 6·5 kilogrammes. This observation appears to justify the conclusion that a diabetic patient in reality requires a smaller number of calories than a healthy person.

I long since arrived at the same conclusion by observation of diabetic patients who had been placed on a vegetable diet. In this I see a case of self-protection of the organism, which adjusts itself to a smaller quantity of food, when the conditions of nourishment are unfavourable; an analogy is to be found in the behaviour of a starving organism. The difficulties and the degree of this adjustment vary with each individual case. Special difficulties present themselves when unfavourable conditions of nutrition supervene suddenly, as in acute cases. On account of irrational dieting, especially in the direction of over-feeding, this endeavour on the part of the organism may be frustrated, whereas, on the contrary, a careful regulation of the quantity of food promotes a salutary reaction. In every diabetic diet I hold it to be most necessary that the nourishing condition for each patient should be tested, and that the minimum quantity should be ascertained on which the patient can exist, and that the organism should become accustomed to this reduction of quantity.

Very little attention has hitherto been directed to this factor in diabetic therapeutics, and the dieting from a quantitative point of view has merely been regulated in accordance with the general principles of the theory of calories; the number of calories required being calculated from the body weight. The slow adaptation of the system to a reduced diet follows exactly the same law, whatever the reason for the reduction of food may be. It is a well recognised fact that the system can be trained to exist on small quantities of food. From this point of view the experience of the Japanese doctors is especially interesting. They teach that with a fixed diet (a vegetable diet) the natives are satisfied with a remarkably small number of heat-producing foods, in spite of which their capacity for work remains undiminished.

I long since called attention to the fact that a diabetic patient, who had been put on a vegetable diet, when the number of calories supplied is far below the average, can exist a long time, and even put on weight. The vegetable regimen provides a diet on which the subject can maintain his usual weight on the minimum number of calories, especially if there be no necessity for him to work. In respect of an invalid's diet the question of course does not enter.

These conclusions do not apply only to diabetic therapeutics, but to all similar conditions, inasmuch as they show that the quality of the food is of great importance in its bearing on metabolic assimilation in each individual case. It is, however, of especial interest in the treatment of diabetes since we require to reduce the quantity of food without causing inanition. The suitability of a smaller diet for diabetic patients was known to Bouchardat, whose maxim for this class of patient was *mangez le moins possible*. This injunction I unhesitatingly endorse. As has already been pointed out, the ideal to be aimed at in the diet is to find out the minimum on which the organism can exist without loss of weight.

This theory is based on the consideration of the absorptive processes taking place in diabetes. Most authors state that in diabetes there is a diminution in the absorption of sugar. The manifest increase of urinary sugar following the absorption of carbohydrates affords the main argument in support of this theory. A large number of facts can, however, be cited, which cannot be explained by this theory. Many diabetic subjects, for example, who are able to digest a small quantity of carbohydrates, if fed on albumen manifest an increase of urinary sugar. The fact that glycosuria is influenced by the ingestion of albumen suggests another theory on diabetic metabolism, viz., that diabetic glycosuria is brought about by an increased formation of sugar from the tissues. We know that carbohydrate and albumen in the body form highly complex compounds, and that under certain circumstances the component parts thereof become separated. If carbohydrates are liberated it is unnecessary for the nitrogenous substances, after the breaking up of the sugar, to be resolved into their constituents, but may be retained in the body in one form or another. From this it will be seen that sugar can be built up in the system from nitrogenous substances without causing any increase of nitrogen in the urine. Therefore the quantity of nitrogen in the urine cannot be taken as an index of the amount of nitrogen-containing substances employed in sugar formation.

Kolisch communicated this theory many years ago, and at a later date it was accepted by Umber and Pavy. The latter regards the carbohydrates existing in the protoplasmic molecule as side-chains which can more easily be attacked than the nucleus of nitrogen. This view of Pavy's helps one to understand the process in question. Pavy expresses the idea by saying that the breaking up of the side-chains has no influence on the separation of nitrogen. Only when all the side-chains are broken up and the nucleus is beginning to be decomposed can a relationship exist between the sugar and the nitrogen in the urine. My personal opinion is that even then by the retention of nitrogen this relationship can be altered to the disadvantage of the nitrogen.

If the separation of the carbohydrate group from the protoplasmic molecule, which unquestionably represents a process existing in the normal organism, is increased through some influence—a poison, for instance—we speak of an increased formation or breaking up of sugar molecules when the quantity of nitrogen in the urine remains unaltered. If this increased formation continues, as in diabetes, it will impoverish the system in respect of carbon.

This separation of sugar will last so long as sugar-forming compounds are present in the body, and will vary in extent according to the intensity of the irritation by which it is produced. In this way an explanation is afforded of a number of facts in the pathology of diabetes which was impossible by the theory of disturbance of sugar formation. It is a fact that in seven cases of diabetes observed shortly before death the glycosuria diminished. If we assume that the glycosuria is produced only as the result of a reduction of the power of breaking up the sugar, this fact is incapable of explanation. It is impossible to accept the theory that at the climax of the disease the power of preventing the formation of sugar has suddenly come into play. It is, on the contrary, quite easy to understand that the store of carbohydrates in the body has been exhausted, and that no further formation of sugar is possible. The fact that in diabetes at this stage, in whom the glycosuria has disappeared, the ingestion of carbohydrate no longer produces any increase in the urinary sugar is now also explained. We can imagine that the carbohydrates taken with the food will be used in the first place to supply the deficiency of carbon. Therefore in coma the possibility of an intravenous diffusion of sugar appears worthy of consideration. In favour of the adoption of the theory of separation of sugar by irritation, the frequent appearance of spontaneous fluctuation of glycosuria may be adduced. We frequently notice that with a practically uniform diet a sudden increase of glycosuria to the extent of one or two per cent., which disappears as suddenly as it came. These oscillations cannot be explained on the theory of the impaired absorption of sugar.

The irritation theory is partly confirmed by the reduction of the diabetic glycosuria which follows the administration of opium. It is not to be supposed that opium causes a strengthening of the function of the cells which has been disturbed by the assimilation of sugar, whereas sedative action of opium on an irritative process can readily be grasped.

Moreover, against the theory of the disturbed assimilation of sugar are certain chemical theories. In E. Fischer's works on the subject it is clearly stated that the assimilation of a substance by the cells depends on the similar configuration existing between the molecules. These statements do not apply merely to enzymes and one-celled organisms such as yeast, but also to the cellular structures of the animal body. The value of carbohydrates in the body is governed by these chemical laws, the greater or smaller usefulness of the various carbohydrates in the system is in direct proportion to the existence of analogous chemical groups in the protoplasm, which, according to Fischer, fit as the key to the lock. Therefore all alterations in the toleration for carbohydrates must be associated with an alteration in the chemical composition of the protoplasm, otherwise the cases in which there is a sudden appearance of glycosuria are incapable of explanation, as, for example, the experimental cases. On the other hand, they are easily understood if we admit the "irritation theory," which assumes the existence of copious sugar formation at the expense of the tissues.

The most powerful argument in favour of the theory of a disturbed assimilation of sugar in diabetes, is the continuance of the diabetic glycosuria on a diet of carbohydrate; in many cases the whole of the sugar ingested appears in the urine. This direct quantitative relationship between the sugar ingested in, and that appearing in the urine is however not the rule.

Trustworthy observations teach us that in cases in which the so-called toleration limit for sugar has been fixed, that not all the sugar which is in excess of this limit is excreted (Kulz, Mering).

Kulz, for instance, gives the following:

Excretion in the urine.

Intake of 30 grms. of dextrose	4 grs.
„ 50 „	5 grs. (not 4 + 20).
„ 90 „	13 grs. (4 + 60).

I can myself give numerous examples in which, apparently, by increasing the intake of carbohydrates, the toleration is increased, as for example, when an intake of 50 grms. of carbohydrates = 10 grs., *i.e.*, a 20 per cent., while with an intake of 100 grms. of carbohydrates still only 10 grms. is excreted, *e.g.*, 10 per cent. In many diabetics the proportion of urinary sugar remains constant in spite of variations in the amount of carbohydrates ingested at any rate, within certain limits.

Naunyn describes the case as "paradoxical glycosuria" When, on the other hand, after a long period of abstention from carbohydrates they are better borne, we must not, as is usually the case, jump to the conclusion that by deprivation of carbohydrates the function of the assimilation of sugar is spared and therefore strengthened. If we remember that the assimilation of sugar is a purely chemical process depending on the existence of certain chemical constituents of the protoplasmic molecule such a theory will be seen to be untenable. These considerations suggest that the behaviour of diabetics may be explained by the fact of suppression of carbohydrates; that is to say, that a diminution of the intake of carbohydrate diminishes the material from which the sugar is derived. I wish to insist on these data as affording a most important therapeutic indication, viz., to allow diabetic patients as much carbohydrate as they can bear, taking into account the glycosuria, otherwise the system soon gets deficient in carbon.

It must be clearly understood that both the quality and quantity of the carbohydrates have an important bearing in determining the maximum amount of carbohydrates that can be taken, as will be clear from the influence of albumen on the glycosuria. That diabetic glycosuria is increased by the ingestion of albumen was long since proved by Bouchardat, Pavy and Cantani. The discovery by Pavy of complex carbohydrate compounds in the molecule of albumen originated the idea that this preformed carbohydrate molecule is the source of the glycosuria after a meal rich in albumen. This theory gained additional plausibility by the researches of Schondorff, who succeeded in showing that only those molecules of albumen form glycogen in the animal body which contain ready-formed carbohydrate molecules. Schondorff fed his patient on casein, an albuminous substance from which, up to the present, no ready-formed carbohydrate has been isolated, and he found no increase in the glycogen. The accuracy of Schondorff's conclusions has not, however, been demonstrated, and they have been called in question by Bendex, Cremer, Cohn, who assert that under suitable conditions the casein can yield the material for the formation of a large amount of sugar.

That it cannot be the ready formed sugar which, in diabetes, leads to an increase of glycosuria on the ingestion of albumen has been demonstrated in the older writings of Kulz, who proved that casein can cause a marked increase in the glycosuria. The latest chemical researches on the nature of the albuminous sugars negative the opinion that the preformed sugar is the source of the increased glycosuria.

The works of Müller, Neuberg, Blumenthal and Mayer, and especially those of Lingstein, show without a shadow of a doubt that the sugar in albumen is identical with chitosamim. According to the researches of Fabian, Offer and Fränkel, chitosamim is not an intermediate form of glycogen, so it cannot be the source of the increased formation of dextrose. The chief argument against the formation of carbohydrate in diabetes from the preformed carbohydrate in albumen molecules lies in their quantitative relationships. According to Kossel, at least 80 per cent. of the carbon in albumen exists in the form of hexonbases and amido acids, so that at the most only 20 per cent. can exist as preformed sugar. As a matter of fact, up to the present, only 1·10 per cent. has been separated.

It follows therefore that the sugar must be synthetically formed from the albumen.

The quantitative relation between albumen and the sugar formed therefrom in the organism has not yet been definitely settled. There seem to be the widest variations from a quantitative point of view between the various albuminous bodies, and also between the normal and diabetic organisms.

Many facts may tend to produce diabetic glycosuria after the ingestion of albumen, as I have already pointed out in my text-book on "Diabetic Therapeutics." Albumen is the nutritive base which is the starting point of organic oxidation processes, as albumen is most nearly related to the protoplasm of the tissues. Albumen, moreover, exerts the greatest stimulation to nutrition. The ingested albumen will be decomposed as supplied without regard to the necessity therefor. The decomposition, however, is preceded by the entrance of the albumen-molecule into the cell protoplasm, or at least an intimate contact between the nutrient albumen and the protoplasm must be brought about. In this way a greater attraction is exerted on the protoplasm. This attraction can split up the protoplasmic molecule, which consists of albumen, carbohydrate, fat, salts, &c., and in this way, with a food consisting of albumen, the formation of sugar by the breaking down of the protoplasm can take place. At the same time the disintegrated albumen is the source of the material from which sugar is synthetically built up, and to such a degree that theoretically, after deduction of the carbon excreted in the urine, 1 gramme of nitrogen is equivalent to 8 grammes of sugar.

From the researches of phlorizin diabetes and pancreatic diabetes much smaller values were found, viz., 1 : 2,8 (Minkowski), 1 : 3,2 (Muller), 1 : 4,2 (Lusk and Halsev).

In the experimental results it is always assumed that the total amount of sugar present in the urine is formed exclusively from the albumen, the index of which represents the amount of nitrogen excreted in the urine.

In this connection it has not been taken into consideration that sugar may also have been separated from the higher forms of proteids, whose nitrogen is being retained within the body. Now and then in some certain cases the above figures are exceeded, and a larger quantity of sugar appears in the urine, more even than the proportion corresponding to 1·8. Some authors admit a sugar formation from fat. (Noorden, Rumpf, Rosenquit, Mohr.)

In this theory we challenge the values ascribed to the nitrogen as being disproportionate to the amount of decomposed albumen, as well as the view that nitrogen is readily retained. The latest researches of Lowi, Lusk, Hirschfeld, militate greatly, on quite other grounds, against the theory of the formation of sugar from fat. Hirschfeld, for example, found that in a phlorizinised animal glycosuria is reduced considerably if the supply of albumen is diminished and the decomposition of fat increased. Lowi has proved the retention of nitrogen in phlorizin glycosuria. The fact, moreover, that excess of sugar secretion beyond the theoretically possible quantity (from albumen) is only met with in the severest cases, shortly before death, renders it possible that in these cases nitrogen is retained in the system. These facts can be explained if the sugar is split off from the albumen as I have suggested. The formation of sugar such as we have already insisted upon, must lead to a deficiency in the amount of carbon in the body, and therefore in extreme cases, when compensation is not possible, it must lead to a dissolution of the organism. It is very remarkable, and the fact is also of great importance in dietetic therapeutics, that the various albuminous bodies behave in different ways on diabetic glycosuria. From this point of view I may recall the fact discovered by me that the vegetable albumen has not nearly as marked an effect in increasing diabetic glycosuria as that produced by animal albumen. The study of the different animal albumens reveals a large number of facts which tend to show that great differences exist between their respective behaviour.

Luthje found an especially well-marked increase in the glycosuria when patients were fed on nutrose (casein) and pancreatic substances, and a less-marked increase in the amount on feeding with albumen and thymus. Sandmeyer observed the increase only on giving raw pancreas, and when this was cooked it was absent. This is explained by the ferment action of the pancreas and better digestion of the food. Halsey, in phlorizin animals, observed a different behaviour to that of Luthje, in that he noticed a greater increase after albumen. Rengi and Reale found it to be more marked with nuclein. The negative behaviour of thymus, as explained by Luthje, is incomprehensible. These contradictory statements make it possible that the different albuminous bodies supply the material for the synthetical formation of sugar, but that they are not all of the same value in their bearing on diabetic glycosuria.

From this point of view the irritative action which has been repeatedly referred to upon the protoplasm plays an important part, since, according to the quality of the albuminous bodies, so the sugar-production varies in intensity.

From what precedes we are therefore justified in concluding (1) that the individual treatment of diabetes has not only to first discover, as has hitherto been done, the so-called toleration capacity for carbohydrates, but the dieting requirements of the organism and the minimum of nutriment on which the patient can exist. If the feasible demand for food should gradually be reduced. (2) The toleration capacity for carbohydrate really depends upon the composition of the food which is given apart from carbohydrates, and therefore such food is to be selected as contains the maximum of carbohydrate that can be tolerated. In this direction it is advisable to limit the quantity of albumen to that absolutely necessary. (3) A vegetable diet agrees with diabetes better than any other, inasmuch as it contains the minimum number of calories, the minimum of albumen, and the maximum of carbohydrates. (4) The proportion of fat must be determined in accordance with general diabetic requirements.

The fourth Scandinavian Medical Congress will be held at Helsingfors from July 4th to 6th.

IS THERE ANY REAL "DECIDUOMA MALIGNUM?" (a)

By HERBERT SNOW, M.D. Lond., &c.,

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By this query it is not, of course, intended to deny the long-established sequence of malignant developments following immediately upon, and often unmistakably caused by, the trauma of parturition; but to investigate how far these developments show any title to a special term differentiating them from the ordinary cancerous new-growths appearing in or about the uterus, without any question of pregnancy.

Strong doubts on the point have several times been expressed before the Society by myself and others. I therefore thought it desirable to thresh the matter out, if possible, more completely. After putting down this paper, I found that the subject had already been very ably and amply dealt with in a communication to the Obstetrical Society by Dr. T. W. Eden (*Obst. Trans.* vol. 38, 1826); and have accordingly largely availed myself of this elaborate digest—which I would recommend anyone tempted to swell the huge flood of "deciduoma" literature, first to read.

This flood was first let loose upon us by Sänger in 1889 (Ueber sarcoma uteri deciduo-cellulare, *Cent. f. Gynak*). A primipara, æt. 23, fell from a railway carriage, and aborted at the eighth week. She had continuous hæmorrhage for three weeks, and in the fourth high fever. The curette was resorted to, with relief to the bleeding, but otherwise no improvement, on the contrary an extensive inflammatory exudation appeared around the uterus, which itself became larger. There was also a large swelling in the left iliac fossa, thought to be purulent but found to be otherwise. Death took place seven months afterwards, with signs of pulmonary metastasis. The growth proved under the microscope to be a "sarcoma." Sänger thought it had developed in the decidua, simply because it contained numbers of large cells identical with decidual cells; and also "plasmodia" resembling the decidual giant-cells. He did not suggest that fœtal structures played any part in the development. Since then, as Dr. Eden well remarks, "Almost every malignant growth discovered in the puerperium has been called in Germany *deciduoma.*" And now our American cousins have also taken the matter up with considerable zeal.

Now the difficulty in accepting this view of Sänger's lies in the fact that the decidua contains no cell-elements distinguishable from those of ordinary connective tissue, so that even if the decidua, or some remnant of it, did generate a new growth, we should not be able to differentiate this microscopically from ordinary sarcoma or myo-sarcoma. And to constitute the disease a distinct cancer species, it would be requisite to demonstrate special symptoms, or a clinical career materially differing from that of the latter.

Since 1889, however, the question has been considerably expanded, and I fear at the same time obscured by becoming mixed up with that of placental development; and with the controversy whether the terminal epithelial layers of the chorionic villus are both fœtal, or one maternal. I would remind the Society that the outer layer, considered by some to be maternal, is described as "a thin stratum of granular protoplasm, showing no differentiation into cells." At irregular intervals are small oval nuclei. This layer constitutes the —in this connection—highly-celebrated "syncytium," and often spreads out into large "plasmodia."

The inner layer (Langhan's) consists, on the other hand, of distinctly differentiated epithelial cells with large round or oval nuclei. It is contended by some that this layer is not concerned in the generation of D. malignum, though every microscopist must recognise the difficulty of establishing such a position when a malignant growth is in question.

The reference of deciduoma to chorionic epithelium obviously controverts the views of the originator, and implies that the title he bestowed on it is erroneous. But assuming for the moment that the reference is accurate, we have then to ask, whether there is a specific *epithelial* cell element which will enable us to differentiate "deciduoma malignum" when we encounter it? It has been already shown that there is no such badge of connective tissue origin, because the decidua contains no pathognomonic cell whatever.

(a) Read before the British Gynæcological Society, June 12th, 1902.

Everything here turns on the "syncytium," and the "plasmodial masses" supposed to be derived therefrom. No chorionic villi have ever been detected in these growths.

Now the most learned pathologist extant could not give any definite opinion upon the precise nature of a malignant growth, based merely on plates in professional journals, supposed to depict microscopic phenomena. How much less the ordinary gynæcologist, who has to run and read! The difficulty is at the present time enhanced by the prevailing fashion of reproducing micro-photographs, which are always in the highest degree misleading, when any malignant cell-growth is concerned. A conscientious drawing *may* convey the truth, but a micro-photograph *cannot*. The phenomena visible in a microscopic field are so complex that it is utterly impossible to reason about them collectively. You can prove anything only by partially ignoring them, just as the mathematician has to define the line as "length without breadth." No line is without breadth, but for the particular purpose in view, that breadth must perforce be ignored.

Then, again, as I have often previously pointed out, the habit, so far as I know universal among professional pathologists, of examining prepared sections only, involves numerous errors. It must be stigmatised as vicious and pre-eminently unscientific. A prepared thin section admirably displays the motology of a morbid growth, and the correlation or distribution of its component cells. But, as a rule, the process of preparation for section-cutting completely disguises the shape of those cells, to say nothing of (perhaps) other important characters. On a correct appreciation, however, of the shape alone an accurate recognition of the species of a malignant lesion commonly hinges.

No microscopic report in such a connection should be held valid without resort to each of the two methods. It should also contain a description or delineation of the individual cells as nearly as possible in their natural state; in addition to the routine account of their distribution in the prepared thin section.

I would remind the Society that the cases of "D. malignum" have been mostly recorded by gynæcologists, who have met with only this single instance, and with the majority of whom, pathology is hardly a strong point.

But experts in the habit of microscopically examining other forms of malignant tumour, state that there is absolutely nothing in the so-called "plasmodial" cell-masses, which cannot be exactly parallelled by the sections of any rapidly-growing sarcoma from other parts of the body. In the latter you commonly find large masses of nuclei embedded in a jelly-like material which in the prepared thin section exhibits no distinction of separate cells, though indeed, on examining a simple "scraping" with the aid of a gentian violet, or some similar stain, there is no difficulty in discriminating the cell-elements, spindle-shaped and multi nucleated.

The differentiation of D. malignum on microscopic evidence alone, whether an epithelial or a connective tissue origin be in question, thus falls to the ground; and the talk of "plasmodial" masses, referable to the "syncytium," can be characterised only as "jargon."

Before leaving the microscope I exhibit the *Journal of Pathology and Bacteriology* for October, 1898, which contains an instructive example of what I regard as the manufacture of this supposititious lesion solely on microscopic evidence. A case is very elaborately reported by Professor J. K. Keily and Dr. Treacher, who refer its origin to the chorionic epithelium, and illustrate their paper by micro-photographs. If you look at Figs. 8 and 9, Pl. xxxviii, you see the delineation of a "large plasmodium," on the faith of a micro-photographic view assuredly not sufficiently clear to warrant such a construction, and displaying no feature whatever not found in ordinary sarcoma of other parts. Secondly, when you turn to Fig. 14, Plate xxxix., you see what appears to be a mass of huge spindle-shaped nuclei and cells, characteristic of sarcoma, or of what is most probable, when the uterus is concerned, of myo-sarcoma, arising from the muscular nuclei.

As some reference was made here recently to certain "branching cells" as characteristic, I also exhibit the drawing by myself of a typical myxoma, as published in my "Treatise on Cancers," showing similar cells.

We will now glance at some of the typical cases, mainly with the view of discovering whether, as the microscopic evidence fails, there is anything in the clinical history to warrant the view of a distinct cancer species.

At the April meeting of this Society, our esteemed President reported a case. He expressly stated that he did so on the strength of a microscopic report furnished to him. There had been no pregnancy for six years. The only unusual clinical feature was the occurrence of a secondary nodule, I think, on the vulva. His paper I regard as specially valuable in the present connection, because it demonstrates that lesions, which expert microscopists identify with D. malignum, attack the uterus altogether apart from pregnancy.

Marchand (*a*) records two cases. In the first a girl, æt. 17, had a bleeding tumour of the vaginal wall which was scraped. It recurred in a few days, and was scraped again. A large abdominal tumour appeared, followed by death in three weeks from pulmonary embolism. At the autopsy a distended and ruptured left Fallopian tube was found; it contained a necrotic mass resembling placental tissue, and growing apparently from its wall.

No fœtus and no chorionic villi were detected. There was no evidence of pregnancy in any shape; and the case may very well have been a primary malignant tumour of the Fallopian tube.

His second case was that of a noni-parà, æt. 34. There was severe hæmorrhage in the third week after a normal labour at full term. A large quantity of blood-clot and placental-looking tissue were removed. Hæmorrhage recurred four months later; and was similarly treated. On a third attack within a few weeks, the patient was anæsthetised. The uterus was found enlarged, retroverted, and adherent to the floor of Douglas' pouch. In attempting to replace it perforation by the sound occurred, so hysterectomy was performed. The woman remained well six months afterwards.

There is obviously no clinical symptom differentiating this case from one of ordinary uterine carcinoma.

Whitridge Williams's case ("Johns Hopkins Hosp. Reports," vol. iv., No. 9), was that of a negress, VI.-para, æt. 35. In the second week after normal labour a small painful nodule appeared in the right labium majora. By the fifth week this had reached the size of a hen's egg, and began to slough. The woman died three months afterwards, seemingly of septicæmia. An extensive sloughing tumour of the vulva, a small secondary growth in the vaginal wall, two small tumours in the uterus, the larger only 1¼ in. by ⅞ in. by ¾ in., metastases in left ovary, lungs, spleen, and kidneys were the post-mortem phenomena. The existence of any uterine tumour had not been suspected till the autopsy.

There can be little question that the vulvar growth was here the primary lesion.

Gottschalk's case ("Das Sarcoma der Chorionzotten," *Archiv f. Gynak.*, Bd. XLVI.) was that of a V.-para, æt. 42. Severe hæmorrhage occurred about the sixth week of the puerperium. Curette used, and again twice in the next four months. The enlarged uterus was then explored, and soft masses twice removed by the fingers. A prompt recurrence led to hysterectomy in August, 1892, six months after the first attack of hæmorrhage, which is assumed to have been due to a miscarriage. The woman remained well till the January following. Then a large mass appeared in the right hypochondrium, and death followed in March. There were metastases in the lungs, spleen, and right kidney.

Gottschalk believes that his case arose from the

(*a*) *Centralblatt f. Gynak.*, 1889, viii., 132.

sarcomatous transformation of the stroma of retained chorionic villi. Eden states that the structures figured as sarcomatous villi, are very little like villi at all, and doubts the fact of gestation. The clinical history is obviously in no wise distinctive.

Miss Julia Cock's case (*Brit. Med. Jour.*, 1895, p. 1,819) was that of a woman, æt. 30, who had been three weeks confined of her fourth child. The labour was normal, and the placenta considered complete. Severe hæmorrhage took place on June 19th. On the 20th, under anæsthesia, a mass, in appearance and touch resembling placental tissue, was found adherent to the posterior uterine wall, and was removed by the finger and curette. The patient died on July 25th, seven weeks after labour. Metastases were found in an ovary and in both lungs.

I will ask you particularly to note this case; because it exemplifies the most important practical corollary I shall presently lay before you, Unfortunately as usual, the early history is defective. But even in the most acute forms of cancer some time is required for the development of widely sundered metastases; and there can be no doubt that the malignancy had been commenced long before parturition, to say the least.

Kelly and Treacher's case cited above (*Journal of Pathology and Bacteriology*, 1898, No. iii., vol. V.) refers to a II.-para, æt. 29. On February 2nd she consulted her medical attendant for hæmoptysis, supposed to be tuberculous. On June 18th she passed a mole as large as a Jaffa orange. On August 7th a growth was found on the anterior vaginal wall and was diagnosed as an "ulcerating hæmatoma." The patient died on October 19th. At the autopsy the posterior uterine wall was found occupied by a tumour as large as an orange, resembling, to the naked eye, placental tissue. Huge masses occurred on both sides of the vagina and cervix. The vessels were very large and numerous; one large vein was filled by an oval mass of new growth. Both lungs were full of secondary metastases.

The history denotes malignancy of many months' standing at the lowest computation. We may not unreasonably infer therefrom that it preceded the pregnancy and caused the eventual death of the fœtus. Hæmoptysis, presumably due to the pulmonary metastases, is described as the first ill-symptom. That would imply an advanced stage of disease. We are not told when impregnation actually took place.

Dr. Herbert Spencer's case (*Obst. Trans.*, 1896, xxxviii.) was that of a II.-para, æt. 27. Hæmorrhage occurred twenty-eight days after labour. Death followed ten and a-half weeks after delivery. An ulcerated and gangrenous growth was found at the placental site; the ulceration having nearly perforated the fundus. There were metastases in the cervix and lungs. Apparently a "large-celled sarcoma with typical syncytium."

Here again was a malignant lesion of long-standing. There does not appear in the report anything to show decidual origin.

Immediately preceding this in the volume (*Obstet. Transac.*, xxxviii.) is another headed "Deciduoma Malignum," and recorded by Mr. Rutherford Morison. A woman, IX.-para, æt. 35, bled seriously six weeks after confinement. This was followed by other attacks. The Clinical Research Association reported the scrapings to show "abundant evidence of squamous-celled epithelioma." There was subsequent recurrence in the lungs and death.

Apfelstadt and Aschoff (*Archiv f. Gynak.*, vol 1, 1896) record two cases. A woman, æt. 33, aborted at the fourth month, on October 4th, 1894. The membranes were passed unruptured. Severe uterine hæmorrhages followed. On February 5th, 1895, a mass was removed from the uterus. On May 17th the curette was used. On May 24th hysterectomy was performed, with death on the twenty-sixth day subsequently. The uterus contained a cancerous growth. There were metastases in liver, both lungs, pancreas, mesentery, intestines, and cancellous tissue of head of one femur.

The second patient was æt. 42, and was delivered of a vesicular mole on March 21st, 1895. The left labium became swollen, and the swelling extended up the vagina. On June 19th it was laid open; then, to the surprise of the observers, tissue "broadly resembling a vesicular mole was found growing from its walls." On June 20th similar masses were removed from the uterine cavity. The woman died from pyæmia on July 25th. The spleen and lungs were secondarily implicated.

The extensive secondary lesions of the first case make it noteworthy. They denote a lapse of many months, and the almost certain commencement of the malignant process before impregnation. The second would seem to have been a primary sarcoma of the labium or vagina, acute under the hyperæmia of pregnancy.

Lastly, I would merely cite a case reported by Schauta (*Centralb. f. Gynak*, vol. IX., 1895), because, in connection with it we find formulated (*Brit. Med. Journ. Abstract*, April 13th, 1895) the highest ultra-refinement upon this hypothetical decidual or chorionic lesion by division into three distinct forms.

"In the first, proliferation of the connective tissue of a decidual relic occurs (Gottschalk's sarcoma of the chorionic villi). In the second, the epithelium of the villi proliferates (Klein's carcinoma of the villi). In the third and commonest variety, the decidua cells and not the epithelium of the villi proliferate; hence the new growth must be reckoned as a sarcoma (sarcoma deciduo-cellulare, according to Schauta)."

Truly a pathological net, with meshes sufficiently wide!

S. Eden's verdict on the twenty-eight cases recorded to 1896 is that "several were ordinary forms of uterine cancer. The remainder all possess the general characters of sarcomata."

I submit that the only conclusions possible under the circumstances are that the term "D. malignum" is misleading and should be abolished. That, so far, no valid evidence of the generation of malignant growths from placental structures, whether decidual or chorionic, has yet been adduced. That the lesions described under the above title do not differ, microscopically or clinically, from the ordinary malignant diseases of the uterus, carcinoma, sarcoma or myo-sarcoma.

Moreover, I would strongly urge on the Society that the practical bearing of the cases so reported has, in eagerness to startle us with something rare and strange, been overlooked, for the records of a considerable number indicate that the malignancy had commenced before impregnation, but had not been recognised until, in most instances, abortion—in a very few, delivery at full term—had taken place. The latter event is, of course, rare, and not to be accepted without scrutiny. Still I cannot see how the clinical facts can be interpreted otherwise. We find ourselves face to face with extensive lesions which must have been established long before parturition. What we know of cancer causation elsewhere renders it highly improbable that they can have commenced during pregnancy. You never have "cancer" set up, while healthy cell proliferation is going on. The only inference possible is, that the malignant development must have begun before impregnation; the phenomena of cancer in the uterine body, always for a time obscure and insidious, being masked by the pregnancy.

Unfortunately, all the histories I have read are extremely defective, both as to the mode of causation, and the early career. Many bear eloquent testimony to the futility, and indeed to the dangers, of the curette, in these puerperal cases; often used, as it were, in the dark. The only valid treatment is complete hysterectomy.

With greater circumspection and more accurate diagnosis in the early months of pregnancy; with recognition of a possible concealed malignant lesion concurrent with a living fœtus; with the precaution to dilate and examine digitally, before resorting to the curette during the puerperium, some of the disasters here apparent should be rendered impossible in the future.

Civil Surgeon McLibin has succumbed to typhoid fever on the journey back from the Cape. His body was brought ashore at Southampton last week from the transport *Plassy*.

A NOTE ON THE
IMPORTANCE OF ATTENTION TO THE HEART'S ACTION DURING ILLNESS.

By ALEXANDER DUKE, F.R.C.P.

The paramount importance of attending to the heart's action during illness of any severity cannot be too strongly enforced on the practitioner. The very common expression, death from "heart failure," has now become so well known that in cases of doubt any layman who reads his daily paper could supply this stereotyped diagnosis.

I have several times seen patients suffering from marked symptoms of functional disorder of kidneys, lungs, liver, &c., where the heart has been entirely overlooked and no examination made of that all-important organ. I have also seen a steam kettle pouring out volumes of moist air which the patient was breathing in under the delusion the bronchial tubes were *altogether* at fault when the real cause (cardiac), was left untreated. On removal of bronchitis kettle and a suitable treatment directed to the heart, the copious expectoration and cough vanished.

"Heart failure," like "influenza," is a most convenient, and, I regret to say, readily accepted diagnosis by the public in general.

What watchmaker (may I ask ?) would think of attending to all the various works of a watch which failed to keep time, without any notice being taken of the mainspring ?

I maintain that in *all cases of serious illness the heart should be first examined*, and also, if necessary, during the course of the illness, so as to assist its action when required, and keep the clock ticking at any cost !

The supreme importance of this common-sense proceeding was forcibly impressed upon my mind some time since when paying a friendly visit to a relative of my own who had been confined to bed for some time, I happened to feel his pulse, and finding it, to say the least, thready, I suggested calling the attention of his medical attendant to the heart, with the result that on treatment being directed to that organ the other symptoms soon vanished, and the patient was restored to health.

No matter how successful the treatment may be in removing abnormal symptoms from other organs of the body. What avails it all if the heart ceases to beat ?

London.

Clinical Records.

DELIVERY BY BOSSI'S METHOD IN A CASE OF ALBUMINURIA AT THE SEVENTH MONTH IN A FIBROMATOUS UTERUS. (*a*)

By H. Macnaughton-Jones, M.D., &c.

Some time since I exhibited before the Society Professor Bossi's instrument for rapid dilatation of the uterus, and specified the cases in which its use was indicated. I have quite recently employed it myself, and desire to say a word as to its action.

The fœtus and placenta shown were removed from a patient who, early in the seventh month, was attacked with somewhat severe hæmorrhage. Her medical adviser, Dr. William Barter, had for some time been aware that she was suffering from albuminuria. This had greatly increased, until the urine became almost solid on boiling. There were, however, no attendant uræmic symptoms, nor any cerebral nor visual disturbances. The hæmorrhage recurring, with some attacks of partial syncope and associated sickness, I was consulted, and advised rapid dilatation and delivery of the child. For a few days there had been an absence of fœtal pulsations and projections. Operation was determined upon.

The patient having been anæsthetised, she was carefully prepared, shaved, and the vagina disinfected. The body of the uterus was found to be fibromatous. In twenty minutes dilatation, without any lesion of the cervix or rupture of the membranes, was effected to the extent of six and a-half centimetres. The presentation was that of an arm, with the head lying in the left iliac fossa. As it was found impossible to move the presentation, the membranes were ruptured. In the attempt to bring the head into position the arm came down, with a loop of the funis. In consequence of the impossibility of introducing the hand into the uterus the greatest difficulty was experienced in effecting version. However, by pushing back the arm and raising the head, the foot was ultimately secured and version effected. Great difficulty was also experienced with the after coming head, which was finally delivered by using the blade of a forceps as a vectis. The placenta was shortly afterwards delivered. The fœtus was discoloured, and decomposition had set in, with attendant desquamation. There had evidently been placentitis, with exudations in parts and degeneration, causing in one portion a rather large separation, with resulting extravasation. Fearing that there might be portions of placental tissue remaining, the uterus was several times explored with an ovum forceps, and some placental *débris* were removed. The uterus was then douched out with formalin solution. Two slight lacerations caused by the delivery of the head were secured with cumol gut, and the vagina was loosely tamponned with iodoform gauze. The whole time occupied from the commencement to the close of the operation was exactly one hour. The patient has done well. The description of the appliance (which can be obtained from Messrs. Arnold and Son) appeared in the *British Gynæcological Journal* of February, 1902, and in the *Lancet* of March 1st, 1902.

Transactions of Societies.

BRITISH GYNÆCOLOGICAL SOCIETY.
Meeting held Thursday, June 12th, 1902.

Dr. Heywood Smith, a Vice-President, in the Chair.

The Chairman said that the President, Dr. J. Halliday Croom, who was unfortunately unable to be present, had sent two specimens for the inspection and consideration of the Fellows; the notes on these, read for the President, by Dr. J. J. Macan, were as follows :—

(1) Uterus removed by vaginal hysterectomy for disease supposed to be malignant, but proving to be a fungating fibroid.

(2) Uterus with placenta and large fibroid, removed after Cæsarean section.

The specimen is a uterus removed by vaginal hysterectomy from a woman, æt. 68. There is nothing to record about the operation itself nor about the patient's recovery, which was complete ; but what I have to point out is that this patient was sent to me diagnosed by several medical men as suffering from intra-uterine cancer. She had profuse hæmorrhage, so much so that she was absolutely blanched ; she had a fœtid leucorrhœa and was rapidly losing flesh. A small portion of the uterine tissue removed and examined for me by a microscopist was pronounced malignant, and I therefore decided to operate. About the propriety of performing the operation I have nothing to say, as I believe that it was the best thing to be done for her, but what I want specially to point out is that now, when the uterus has been removed and examination made, the disease proves to be, not cancerous, but simply a fungating fibroid recrudescing in old age. This patient no doubt will live for years, and I shall get the credit of curing cancer, which never existed. This is the second occasion within a short time that this experience has occurred to me, and it is just possible that similar cases may account for many of

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(*a*) Exhibited before the British Gynæcological Society, June 12th, 1902.

the reported instances of successful vaginal hysterectomy for cancer. Of course, I do not for a moment mean to imply that anybody would willingly record untrue cases, but one might very easily fall into such an error. The other specimen I exhibit is that of a large fibroid associated with a uterus containing a placenta. The patient came to me from Calcutta with this pregnancy and associated fibroid tumour. Of course, a delivery at any time *per vias naturales* was an impossibility. I, therefore, waited until the child was viable, and then performed Cæsarean section in the usual way, and so delivered a child, which lived for some considerable time. I thereafter performed a modification of Porro's operation and removed the uterus and tumour entire. The patient had a very short convalescence and left the home well.

The **CHAIRMAN** said that it hardly appeared from the notes, or from the specimen itself, that, large as the tumour was in the second specimen, delivery was absolutely impossible, but evidently it was best that such a tumour should be removed.

Dr. **ROUTH** pointed out that in regard to the first specimen several medical men and a microscopist, presumably an expert, had declared the disease to be cancer. In this the case resembled many that had come under his own notice, in which disease pronounced to be cancerous had turned out not to be malignant at all; it was much to be deplored that as yet no absolutely certain means of diagnosis had been attained, and the statistics as to alleged cures were, therefore, invalidated. No doubt it was quite possible in many cases for a woman to be delivered *per vias naturales*, in spite of the presence of a large uterine fibroid; he had met with such cases, and in one the tumour was quite as large as that before them, and he was preparing to perform Cæsarean section, but owing to an alteration in the position of the child it was born in the natural way.

Dr. **HODGSON** thought that the removal of the uterus must have been absolutely necessary after the Cæsarean section, as efficient contraction and arrest of hæmorrhage could not be expected considering the size of the tumour.

Dr. J. J. **MACAN** said that, as the Chairman had pointed out, the tumour did appear to be in the upper part of the uterus, and supposing the pelvis to have been of normal size delivery might theoretically have been possible, but even so the tumour would have remained. He thought that they must all agree that, being convinced that delivery could not take place by the natural way, the wisest course was to remove the uterus and the tumour with it.

Dr. **MACNAUGHTON-JONES** read notes of the delivery by Bossi's method, at the seventh month, of a macerated fœtus from a fibromatous uterus in a case of albuminuria, which will be found under the heading of "Clinical Records" at page 9.

Dr. **MACNAUGHTON-JONES** added that he believed this was the first time the instrument had been used in this country. It had been fully described in the *Lancet* as well as in the *Journal* of the Society, without, however, sufficiently pointing out that the sheaths on the end of each blade could be removed and replaced after the os was partially dilated. Without these sheaths there was no difficulty in the initial introduction of the instrument even into an unduly contracted os. Professor Leopold, at Dresden, had used the instrument with singular success in eclampsia, as would be seen from an abstract in the May number of the Society's *Journal* to which Dr. Macan had just drawn his attention; but he had seen Leopold use it also in contracted pelvis.

Dr. F. A. **PURCELL**, instancing a case in which a senile and very friable uterus after the rupture of the pedicle of an expelled fibroid, and during the process of dilatation for the purpose of removing the remains of the pedicle, had been perforated by one of Hegar's dilators, said he thought there would have been no danger of such an accident with Bossi's instrument, and he thought that that instrument might be more widely employed than it had yet been.

Dr. **BARTER**, in reply to the Chair, said he could entirely corroborate all that Dr. Macnaughton-Jones had said as to the satisfactory effect of the instrument in rapidly dilating the cervix without interfering with the membranes in the case before them.

Dr. **HEYWOOD SMITH** exhibited Kurz's suture forceps, and described the ingenious way in which, when one blade had been used as a holder to introduce the threaded needle, on closing the instrument the other blade seized, and, when the blades were again separated, withdrew it.

Dr. **HERBERT SNOW** read a paper entitled "Is There any Real Deciduoma Malignum?" which will be found on page 6.

Dr. **HEYWOOD SMITH** (Chairman), after alluding to the able paper recently read to the Society by their President, Dr. J. Halliday Croom, said that on the question as to whether any line of demarcation at all could be drawn between the so-called deciduoma malignum and ordinary sarcoma of the uterus pathologists held very different views; some light might be thrown upon it by those Fellows of the Society who were working on cancer, if they could decide the actual site of the malignant development that had been called deciduoma malignum. Ordinary sarcoma of the body of the uterus originated in the connective tissue of the uterine wall, and, theoretically, at all events, there would be ground for a distinction between it and deciduoma malignum, if there was any truth in attributing the beginnings of the latter to the decidua. It was a striking fact that in many of the reported cases of this affection the patients seemed to have lost ground rapidly, and to have died soon after curetting. He was himself inclined to think that curetting was too much the fashion, and that it was a proceeding that caused very often more irritation than was intended or desirable, and thereby led to the extension of inflammatory disease or malignant new growth. Much stress had been laid upon the occurrence of secondary deposits in the lungs in deciduoma malignum, but it had not been demonstrated that such metastases manifested themselves more freely in that connection than in ordinary cancer of the body of the uterus. In esteeming a drawing more trustworthy than the reproduction of a microphotograph he thought Dr. Snow was rather hard upon authors who used microphotographs. A drawing was necessarily subject to bias, and its author could not always avoid accentuating, quite involuntarily, some points which a photograph would have represented with more truth.

Dr. **MACNAUGHTON-JONES** maintained that as a certain condition arising out of a pre-existing state of pregnancy had been shown in a very large number of cases to be associated with a definite train of symptoms, they were right in recognising that condition as a distinct disease. With further investigation and more accurate knowledge of its pathogenesis they might agree on a better name for that condition than deciduoma malignum, but he thought that as practical men they must admit its occurrence; whether it approached carcinoma or sarcoma in its histology was of little importance compared with the fact that it was a malignant new growth associated with products of pregnancy, and demanded early recognition and prompt extirpation.

Dr. J. J. **MACAN** said that on one point they must all agree with Dr. Snow, that is to say that the term "deciduoma malignum" was improper and should be abandoned. Writing in 1898, Professor Veit recognised the existence of the disease described by Sänger as "deciduoma malignum," though he considered it to be only a sarcoma modified by pregnancy, and enumerated at least ten names which had been given to it. Dr. Haultain, who in 1899 was able to refer to ninety recorded cases, preferred the name "chorio-epithelioma malignum," suggested and employed by Marchand, or "trophoblastoma" (Kanthack). To the ten enumerated by Veit we might add "epithelioma serotina choriale," "chorio carcinoma," "carcinoma uteri syncytiale," "carcinoma choriogenes uteri," given by various observers, and though the multiplicity of these names indicated opposing views as to pathogenesis, they all recognised the existence of the malignant lesion originally called "deciduoma." Widely as Veit differed from Marchand in his explanation of the facts, there was no variance between them as to the clinical aspects and essential microscopic characteristics of the disease which was met with always in connection with pregnancy, and at the site of the placenta, which caused definite clinical symptoms, hæmorrhage of a profuse spouting character, a foul fœtid discharge, rapid cachexia, fever, and, in default of extirpation, death. It was moreover accompained by a remarkably quick development of secondary deposits, not only in the lungs, as was usually the case, but frequently also in the brain, the liver, and the kidneys, and, as had been recorded time and again, early metastases in the vagina and labia. With that clinical picture of the disease, they had a microscopical aspect so definite that Veit stated that the differences in the conditions reported were unimportant. In no other disease had the characteristic trabecular masses of protoplasm been identified, and in regard to the possibility of the development of sarcoma during pregnancy, Dr. Snow himself stated that as cancer is not set up while healthy cell proliferation is going on, such development was most improbable, nor does the implantation of an ovum in a sarcomatous mucosa seem much less so. Whether it was to be considered a sarcoma, a carcinoma or an epithelioma, this malignant condition had been recognised as constituting a definite disease in such a very large number of cases, by men of well-established reputation in the profession, that it seemed to him idle to ask "Is there any real deciduoma malignum?" By whatever name it might be called, there was such a disease, and they must be prepared to meet and deal with it.

Replying to a question of Dr. **Hodson** in regard to the case recorded by the President being unconnected with pregnancy, Dr. **Macan** pointed out that the President had not excluded the possibility of abortion.

Dr. **Snow**, in reply, said that all who had employed the microscope to any considerable extent would appreciate his remarks about micro-photographs; he objected to them not because they blurred the outline, but because they gave a number of details that were inherently misleading. Nothing was more singular than the absence of English names in connection with deciduoma malignum. There were first of all German cases, then American, and then a few, but for years together not a single one, reported in England, and he thought they could not accept cases merely on the basis of high-sounding names, generally from abroad. There was no definite microscopical aspect whatever in this disease; nothing to distinguish it from sarcoma in other parts of the body; nor clinically anything different from the syndromata of ordinary malignant disease of the uterus, under the added stress of pregnancy. There was in fact nothing to indicate that the so-called deciduoma malignum was a special form of malignant disease which could be attributed to the placental structures.

France.

[FROM OUR OWN CORRESPONDENT.]

Paris, June 29th, 1902.

TREATMENT OF DIPHTHERIA.

For the last two or three years Prof. Riegler has treated almost exclusively cases of diphtheria with spray of oxygen water. The results were very encouraging, and seemed to have been quite as good as those obtained by the serum treatment. The false membranes under the oxygen treatment were detached less rapidly, perhaps, than when injections of serum were practised; but, on the other hand, the depressing action of the diphtheritic toxine was in a certain measure paralysed by the peroxide of hydrogen which favoured oxidation.

Our *confrère* recommends gargles night and day with a 3 per cent. solution of oxygen water (two or three tablespoonfuls to a glass of water). In the case of young children who cannot use the gargle he gives the following mixture:—Peroxide of hydrogen, ʒj; syrup, ʒiv; water, ℥iij. A teaspoonful every one or two hours. At the same time the throat is touched with a 3 per cent. solution two or three times a day. These applications are not painful, but should not be repeated too often, as they might provoke in the end œdema of the palate septum.

These gargles of oxygen water have been found equally useful in other non-specific inflammatory affections of the throat and in cases of mercurial stomatitis.

Austria.

[FROM OUR OWN CORRESPONDENT.]

Vienna, June 28th, 1902.

GLOSSAL CARCINOMA.

At the "Gesellschaft der Aertze," Gersuny showed a man on whom he had operated three times for carcinoma of the tongue. In April, last year, the cancer was all removed as well as the infiltrative and submaxillary glands. In September a recrudescence commenced, involving the whole tongue as well as the mucous membrane on the floor of the mouth, which again was removed. Again it recurred involving the lower maxilla, which was again removed along with hyoid bone. After this operation the cosmetic effect was improved by the use of paraffin injections, with which the patient soon became fit to take fluid and soft foods easily, while at the same time he was able to talk quite distinctly. This was accomplished by fitting an indiarubber tongue and a denture into the lower maxillary bone, which greatly improved his appearance as well as supplying the defect.

LUPUS TREATMENT.

Ehrman next showed a patient who had suffered from lupus on both cheeks as well as the lips and nose since 1892, which he had treated with resorcin paste (33 per cent.). This soon caused the whole surface to heal except two small points that have remained quite stationary since 1896.

EASTERN ERYSIPELAS.

Spiegler exhibited a curious case of transitory erysipelas peculiar to the East which left behind it peculiar brown pigmented patches, as well as white tufts of hair on the head and eyebrows. The cause of the phenomenon, he thought, was due to a chemical change in the pigment of the hair probably caused by the irritation of the erysipelas.

Ehrmann thought it an anomalous case of pigmentation from syphilis or a sort of leucoderma where the virus had destroyed or caused the pigmentary cell to shrink destroying its functional activity.

Spiegler said that it was not yet clearly decided whether white hair was entirely pigmentless or whether the pigmentary cells produced a white pigment.

Spiegel said the presence of white pigment was a possible theory, but we had not as yet any proof in support of the hypothesis. All pigmenting granules were divided into two parts, viz., pigmentary crystals and colourless granules, so that by a colouration with concentrated methylene blue the pigmentary granules take on a pretty green, which is due to the blue colouring of the ground substance combining with the brown of the pigment giving the resultant green. Moreover, it was possible that the pigmentary granules might lose their brown colour and then leave nothing but a colourless base.

Models of Ear.

Alexander demonstrated two models of the middle and internal ear, fifteen times their natural size. He had also two others, one at birth, the other in old age. It was observed in these latter that the semicircular canals and the cochlea were well developed, while the vestibule was imperfect. None of the adults gave the same thickness of nerve substance, height of cochlea and size of ampulla. The aquæductus cochlea was smaller in the adult than in the infant. Other models of the labyrinth were exhibited to demonstrate the changes throughout life.

Blood Pressure Computation.

Federn stated that he had now been ten years engaged in measuring the blood pressure of patients and of persons in health, as well as animals, and had formulated the following conclusions:—(*a*) The blood pressure is the expression of the gross kinetic force of the heart which is modified by the resistance met with in the vascular system; (*b*) this is characteristically demonstrated by the influence that menstruation has on the pressure curve; (*c*) irritation of the central end of the divided splanchnic nerve raises the blood pressure; (*d*) the lowest limit of normal blood pressure in a healthy man is between fifty and sixty millimetres of mercury =1·868 to 2·361 inches; (*e*) any sensible irritation or stimulus raises the blood pressure forty millimetres = 1·574 inches, which may be reasonably accepted in explanation of the variable results obtained by the different experimenters in this department of physiology; (*f*) the blood pressure is not constant all over the body, but varies in pressure in different regions, even in the corresponding artery on different sides, such as the radial, where a difference of thirty to forty millimetres = 1·186 to 1·574 inches in one side from the other.

The Operating Theatres.

ROYAL FREE HOSPITAL.

Cataract Operation.—Purulent Meningitis.—Mr. H. Work Dodd operated on a man, æt. 88, who had been sent up from the country, being the subject of double senile cataract. The patient was in excellent condition considering his age, being able to get about and taking great interest in everything around him. His organs were healthy, his mental condition was a little senile, his disposition being somewhat amiably childish, with a tendency to excitability. The ordinary three millimetre operation was performed on the right eye under cocaine; it was noticed at the operation that the conjunctival sac was perfectly healthy and the puncta normal. Every precaution in aseptic surgery was taken. The incision being completed the iris was drawn out by the iridectomy forceps, and the ordinary iridectomy performed; at this moment the patient strained badly, being very excited, compressing the eye and thus causing a certain quantity of vitreous to escape. The lens was satisfactorily removed by means of the vectis; the eye was then dressed in the ordinary way and both eyes bandaged and the patient removed to bed. He remained fairly comfortable all day, but during the first night after the operation he suddenly became violently maniacal, struggled forcibly and tore off the dressings from his eyes; it took five or six people to control him and ultimately it was found necessary to put him into a straight jacket; injections of morphia were then given. During the next day he was in a drowsy state, saying he had no pain but did not feel well; on the second day there was no pain in the eye and he was quieter; the lid of the operated eye was red and swollen; in the evening he was very noisy and troublesome and morphia was again injected; the next day the whole of the right eye region was swollen, red and œdematous, there was chemosis, the cornea looked opaque and yellowish, there was pus in the anterior chamber and in the wound; the tongue was very dry and furred, he complained of no pain, and his temperature was normal, as it had been since the operation. The wound being open no treatment in the way of an incision was adopted, and the patient was treated by lotions, &c. During the next few days the eye discharged freely, became cleaner, and the patient himself gradually got more and more sensible. Eighteen days after the operation the man was so well that he was allowed to get up, and from this time forward he had no bad general symptom; the eye itself became gradually cleaner, ultimately healed, and began shrinking. Nine weeks after the first operation the right eye being perfectly clean and free from pus, Mr. Dodd operated on the left eye to remove the cataract by the same method, only the patient was so troublesome during the beginning of the operation that it was deemed advisable to administer chloroform. Unfortunately, in endeavouring to remove the lens with the vectis, the lens could not be got out, but fell back into the vitreous. Dressings and bandages were put on and the patient removed to bed. Forewarned by what happened on the night after the first operation, Mr. Dodd gave orders that morphia should be injected, and the patient remained quite quiet and sensible, sleeping well. The day after the operation he had a rigor; the operated eye, however, looked quite comfortable. After this he continued having almost daily rigors, for which no cause could be found, as the eye itself was entirely free from suppuration. It was noticed, however, that the skin was becoming more and more jaundiced. At Mr. Dodd's request he was seen by Dr. Carr, who found a patch of dulness about the middle of the right lung behind, and advised that this area should be explored for fluid; this was done on the next day under chloroform, but no fluid was found. The opportunity was taken to remove the shrunken right eyeball. The patient recovered very well from the operation, but he continued to have occasional rigors, became semi-conscious, and had to be fed with a tube. From this period he got rapidly worse, and died twenty-two days after the second operation for cataract. At the post-mortem, thirty-six hours after death, rigor mortis was present, body well nourished, skin very yellow, no pus in right orbit from which the eye had been removed by operation. Dura mater very adherent to skull and to brain. Purulent meningitis present, most marked over frontal lobes and base of brain, and extending down spinal cord. Both ventricles filled with thick greenish yellow pus, left ventricle being more distended than right; no pus in either cavernous sinus nor in the lateral sinuses. Small abscesses between middle and lower lobes of right lung. The liver was tough on section, and there was a superficial abscess on upper surface of right lobe, and the hepatic ducts leading to it were full of pus. Impacted in left hepatic duct was a gall-stone about the size of a walnut; there were also some smaller stones in the ducts leading from it; no pus here. The gall-bladder contained bile and no stone. The other organs were fairly normal. Mr. Dodd thought with regard to the whole case that the probability was that septic material had entered at the period when the patient, in his maniacal excitement, had torn off his bandages after the first operation and exposed the wound in the right eye to infection. A mild species of delirium, he pointed out, is not uncommon in old people after cataract operations if both eyes are bandaged up, and it was sometimes well, he considered, if this condition should begin to show itself to give the patient the use of the sound eye, but in this case this could not be done, as the other eye was also affected with cataract, and therefore useless. It was very difficult, he thought, to account for this extraordinary and unfortunate attack of violent mania, as the post-mortem showed the man to be healthy in all his organs excepting that he had gall-stones in his liver; it was a moot question as to whether there was any connection between the gall-stones and the insanity. If the abscess in the liver had existed before the first operation it might account for a great deal both with regard to the mania and to the suppuration. An interesting point was that the second eye which was operated upon did not suppurate, but a most peculiar thing was that the rigors began the day after this second eye had been operated on. This possibly, however, was a mere coincidence. It was, he considered, an unfortunate case all through, though everything, both at the operations and during the subsequent treatment, was done with the greatest care.

Society of Apothecaries of London.

During the June Examinations the following candidates passed in Surgery.—E. W. C. Bradfield (Section I.), H. B. Drake (Section I), G. W. C. Hollist (Sections I. and II.), G. J. Humphreys (Sections I. and II), E. Osborne (Section II.), F. H. Rotherham (Sections I. and II.), E. M. Stacy (Sections I. and II.), C. J. Taylor (Sections I. and II.), W. P. Taylor, J. Vaillant (Sections I. and II), and F. W. B. Young (Sections I. and II.).

Medicine.—W. Ball (Section I.), T. G. Longstaff (Section I.), A. Mooney (Section I.), C. C. Morgan (Section I.), E. C. Pratt, and E. M. Stacy (Sections I. and II.)

Forensic Medicine.—W. Ball, J. C. S. Dunn, T. G. Longstaff, S. J. Meredith, A. Mooney, E. C. Pratt, and E. M. Stacy.

Midwifery.—L. Courtauld, H. E. Darlington, H. B Drake, E. Gray, B. Hirsch, T. G. Longstaff, E. M. Stacy, H. S. Tumber, and P. L. Vawdrey.

The L S.A. Diploma of the Society was granted to the following candidates, entitling them to practise Medicine, Surgery and Midwifery.—H. E. Darlington, E. Osborne, E. C. Pratt, F. H. Rotherham, E. M. Stacy, C. J. Taylor and W. P. Taylor.

Death of a Medical Man from Chloroform.

Dr. T. P. Harvey, of Hastings, was found dead in bed a few days since, a partially emptied bottle of chloroform standing on the table beside the bed. He had been much worried of late, and it is surmised that he had taken an overdose of the drug when employing it as a narcotic. A verdict of death by misadventure was returned at the inquest.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 2, 1902.

THE KING'S ILLNESS AND THE NATION.

Just as we were going to press last week a great shadow fell upon the nation. On the very eve of the coronation of one of the most popular sovereigns who has ever mounted the throne an implacable illness renders him a helpless and unwilling cause of a really colossal disappointment. The postponement, followed by the announcement that the King was undergoing a grave abdominal operation, constitutes an exceedingly dramatic historical incident. Of the chances of recovery we are most hopeful, even confident, as in the hands of modern surgeons there is an excellent prospect of recovery from perityphlitic abscess if operation be undertaken at a reasonably early period. At the same time there are various points in connection with the King's illness which merit a certain amount of outspoken criticism from the point of view of a medical journal. So far as the diagnosis is concerned the perityphlitis was undoubtedly the cause of the pain in the back which prevented his Majesty from attending the Review at Aldershot about a fortnight ago. We were told that the malady was lumbago from a "chill" and that opium had been administered. As all medical men know, pain in the back is a common sign of inflammation of the colon, so that the King was doubtless suffering from perityphlitis at Aldershot. In spite of that fact he was permitted to drive to Windsor. At the same time a high official of the household reassured an anxious nation by a reply to a London newspaper asking for the truth regarding certain grave rumours: "My best answer is that the King is returning to Windsor." Now, if it were then known that his Majesty was affected with perityphlitis, such an answer is simply trifling with the nation. The *suggestio falsi* is held to be disgraceful in private life, and should be considered no less contemptible in public matters.

If the illness were still considered trifling on the return of the King to Windsor, then we should venture to suggest a remodelling of the medical department of the Household, so that consultations of medical and surgical men actively connected with hospitals might be immediately available upon all occasions. It would be interesting to know at what precise point the diagnosis of perityphlitis was arrived at. While at Windsor the King did not attend Ascot Races, so that he must have been very ill at that time. During those few days the nation was assured that his Majesty had taken carriage exercise freely. It is now generally believed that he did nothing of the kind, and if so, the origin of such absolutely misleading information from official sources demands sifting to the bottom. However that may have been, we hold that from the first the nation was entitled to a clear official announcement as to the precise facts of the illness. Since the operation that course has been adopted, and bulletins have been issued signed by medical men whose names are sufficient guarantee of absolute accuracy. Why should this not always be a matter of routine where Royalty is concerned? In the case of the late President McKinley the earlier reports after the operation were misleading, and filled not only the United States but also the whole world with false hopes. Long ago, in turbulent states of society, there were undoubtedly often grave State reasons for withholding information concerning Royal illnesses. That day is past, however, and with the modern Press it is impossible to conceal the truth for any length of time. It is to be hoped, in the best interests both of Royalty and of the community, any news of the kind may reach the nation from sources that are above suspicion as to their absolute soundness and integrity. Were it not for our implicit trust in the names of the medical men who sign the bulletins posted daily at Buckingham Palace, the report of the present progress of the King would be open to some amount of suspicion. However, we are happy to believe that the diplomatic dallyings with the truth that seem inseparable from the air of Courts and Cabinets are in this instance replaced by the sober statements of fact made by responsible medical men.

BAKEHOUSE LEGISLATION.

THE progress of the sanitary reformer is sure and steady, though often it is extremely slow. No better instance of this tardiness could be found than the way in which bakehouses are being brought within the effective control of the local sanitary authorities. For nearly forty years the subject has been before the public, and the horrors of the cellar bakehouse have been recounted in a fashion not likely to be soon forgotten. The first attempt on the part of the Legislature to control the bakeries was in the year 1863, when the Bakehouse Regulation Act was passed, and some sort of supervision was conferred upon the sanitary authorities as regards leanliness. In 1879 the control was handed over to the factory inspectors, who were already so few in number as to be unable to discharge their existing duties. Under their care the bakehouses fell into a deplorable condition, which continued until, in 1883, control was restored to the vestries. This step in the right direction was strengthened in 1891 by a new Factory Act that gave the inspectors the right of entry at any time, and by the Public Health (London) Act, so far as the Metropolis was concerned, which increased the power to enforce sanitary measures. Then the legislative battle against the underground bakehouse, the source of a great deal of the mischief, began in 1895. In that year a new Factory and Workshop Act enacted that "A place underground shall not be used as a bakehouse unless it was so used at the commencement of this Act." that is to say, on January 1st, 1896. A little practical experience in the working of the Act, however, showed that the clause in question could be readily evaded in the law courts, and much the same observation applies to a similar provision condemning underground bakehouses unless they existed at the time of the passing of the later Factory Act on August 17th, 1901. As the majority of town bakeries are underground, it will be seen that their existence would not be threatened by that provision. The Act of 1901, however, went much further than any previous measure in its determination to put an end to the underground bakehouse. It enacted that "after January 1st, 1904, no underground bakehouse may be used unless the district council is satisfied that it is suitable as regards construction, light, ventilation, and in all other respects." It is apparent that an efficient weapon is thus placed in the hands of the local authorities, but it by no means follows that efficient action will follow. Local bodies are notoriously averse to interference with tradesmen in their district. Moreover, it would be impossible to turn out of their premises at a moment's notice the greater number of the bakers of a given district. Clearly the changes must be anticipated by the action of the borough councils, who will fix standards, and give the bakers due warning of the coming changes. That view is strongly supported by Dr. Orme Dudfield, who has for many years worked faithfully in the cause of bakehouse reform. The subject is one of vital importance to the community. The key to the Public Health aspects of the case was given by Drs. Waldo and Walsh a few years ago when they demonstrated that the interior of a loaf was not necessarily sterilised by baking. The inference clearly is that the pathogenic germs of an infected bakehouse may be distributed to consumers in an active form. This special investigation is well worthy of being conducted much further than was done by the original observers. It is interesting to note that the Medical Officer of Health of Johannesburg, Dr. C. Porter, in an attempt to set in order the bakehouses of that town, directed that all water from suspicious sources should be boiled before being used for making dough. The subject is of first importance to our countrymen in India, where the major part of the bread consumed is made by the natives under filthy conditions. Indeed, there is no civilised country in the world where the subject of bakehouse sanitation is not vital to the welfare of the community.

THE CAVENDISH LECTURE ON APPENDICITIS.

Sir Frederick Treves, in his recent Cavendish lecture on some phases of inflammation of the appendix, of which we publish a full abstract in another column, has ably dealt with a subject which it may safely be said is now attracting world-wide attention. The tragic illness of his Majesty the King on the eve of his coronation has focussed the eyes of all people on the vagaries of the vermiform appendix. Less than twenty years ago appendicitis was practically unrecognised, it found no accepted place in works on medicine, and indeed its very name had not been proposed. It is remarkable that the ages should have gone round and it should have been left for the researchers in the latter years of the nineteenth century to unearth and bring into light the true pathology of this disease. As the lecturer says, "the writing which did more than any other to force upon the medical world a recognition of the true pathology of pericæcal peritonitis was the monograph of Fitz, published in 1886," but this has been ably followed up by his own researches, and assisted by the publications of Deaver, Hawkins, Kelynack, Lockwood, McBurney, Mynter and many other English and American pathologists. The clinical phenomena which are familiarly known as "an attack of appendicitis" are mainly due to the involvement of the peritoneum in the region of the appendix. The disease is essentially a variety of peritonitis. Its manifestations, its effects and its possibilities are those of peritonitis. Sir Frederick Treves, however, contends that appendicitis may occur without symptoms. Extensive inflammation of the appendix leading to great thickening of its walls, to widespread ulceration of its mucous membrane and to some degree even of stenosis, may exist without producing symptoms of any kind. An attack of acute appendicitis may also be preceded by occasions on which the patient has minor seizures of pain in the cæcal district which are of short duration and irregular appearance. In other cases the patient has an abiding trouble in the right iliac fossa which may continue for months, and may or may not be associated with acknowledged attacks of appendicitis. We quite agree that very little is to be gained by the elaborate divisions and sub-divisions which are affected by many in dealing with this matter. The practical conclusion was clearly put by Kelynack in his work on "The Pathology of the Vermiform Appendix," in 1893, when he wrote "whatever pathological grouping of appendicitis may be adopted, the all important practical classification clearly defined in the mind of every physician and surgeon must ever be (1) operative appendicitis and (2) non-operative appendicitis. Such a clearly-defined division is of paramount importance to the patient, for his life will probably depend upon it." Life in a tropical or sub-tropical country is said to have a very marked effect in encouraging appendicitis among Europeans. In female patients an outbreak of appendicitis is frequently coincident with the menstrual period. But the most common and the most conspicuous factor in the ætiology of an attack of appendicitis would seem to be a loaded cæcum. In the treatment of appendicitis, Sir Frederick Treves is a strong opponent of indiscriminate operation. He holds that the greater proportion of cases of appendicitis recover spontaneously, and it is probable that the general mortality of the disease, if examples of all grades be included, is not above 5 per cent. Operations carried out during an acute attack are attended with a risk to life which is considerable, and which is probably expressed by a mortality of over 20 per cent. Relapses may occur after operation carried out during the acute stage. The removal of the appendix during the quiescent period is attended with a very trivial risk, which may be expressed by a mortality of 1 in 500. Immediate operation is demanded at the earliest possible moment in all ultra-acute cases. Immediate operation is also demanded in every case where there is a reasonable suspicion that suppuration has taken place. In other cases the question of operation may be well kept in abeyance during the first few days of the attack, and may usually be left open for decision until the fifth day or after.

Notes on Current Topics.

The English Coronation Honours.

Among the honours conferred upon members of the medical profession, the list whereof is published elsewhere, there are several which will excite special satisfaction in the minds, not only of their recipients, but of their fellow-members of the profession. That Lord Lister, full of years and honours, has been made a member of the Privy Council is a further recognition of the immense benefits which he has conferred upon suffering humanity, benefits in which his Majesty himself now shares. That Sir Frederick Treves should have been made a baronet is in accordance with the fitness of things, having regard to the high position which he has held for years in the surgical world. Should success crown his latest surgical achievement that fact alone will constitute for him a title to the nation's gratitude very inadequately recognised in the honour now bestowed. The Knighthood conferred upon Mr. Victor Horsley is a welcome recognition of a very active and successful career. Young in years, Mr., now Sir, Victor Horsley has made his mark on the scientific surgery of his time, although his indefatigable energy has found employment in many other spheres of professional usefulness. The other knights are all men of whom it may safely be said that one is surprised to find that the distinction had not previously been conferred upon them.

Coronation Honours for Ireland.

Among the names on the list of those on whom the Lord-Lieutenant has, with the approval of his Majesty, announced his intention of conferring the honour of knighthood, are those of two distinguished members of the medical profession—Mr. Thomas Myles, F.R.C.S.I., and Professor William Whitla, M.D. Mr. Thomas Myles has had a distinguished career in his profession. He is the son of a well-known citizen of Limerick, with which city he has still many ties, and was appointed Vice-President of the Royal College of Surgeons in the year 1898, and President in 1900, which office he has but quite recently vacated. He is a visiting surgeon to the Richmond Hospital, and was at one time Professor of Pathology in the School of the Royal College of Surgeons. He has contributed many articles on surgical subjects to the columns of the medical press, and is well known as an operator of high rank. Sir Thomas Myles has in the past taken a deep interest in the welfare of the members of the Army Medical Service and of the Irish Poor-law Service, and has helped in the production of important reforms in these services. We congratulate him on the honour which has been conferred upon him. Professor Whitla is a leading member of the medical profession in Belfast, and is widely known in Ireland and throughout the medical world generally on account of his contributions to medical literature. He is Professor of Materia Medica and Therapeutics in the Queen's College, Belfast, and holds many other important posts. He is the author of a well-known "Manual of Pharmacy, Materia Medica, and Therapeutics," a work which reached its seventh edition in 1898. He has also written an equally well-known "Dictionary of Treatment"; and has made many other contributions to medical literature. Of late, Sir William Whitla's name has been prominently before the members of his profession in Belfast on account of his liberality in presenting the Ulster Medical Society with an institute which will serve as the headquarters of the Society as well as a medical club. His professional brethren will heartily endorse the honour which has been conferred upon him. It cannot, however, be said that honours have been bestowed with a free hand upon the medical profession, and although we do not wish to comment on any omissions, it will occur to many that there are members of the profession who are worthy of a higher honour than that of Knighthood; at least two names occur to us of distinguished medical men who would not have been found unworthy recipients of the higher honour.

Coronation Honours for Scotland.

His Majesty the King has been pleased to create three medical Knights on the occasion of his Coronation. The recipients of the honour are the two Presidents of the Royal Colleges of Edinburgh, and Professor MacEwen, Glasgow University. Professor Thomas Richard Fraser, M.D., LL.D. Glasgow and Aberdeen, F.R.S., President of the Royal College of Physicians, was born in Calcutta in 1841, and, after being educated at Edinburgh University, had the degree of M.D. conferred upon him in 1862. His thesis for that degree was on "The Action and Uses of the Calabar Bean," and gained one of the gold medals given for theses of unusual excellence. His further investigations on this subject were published in the "Transactions" of the Royal Society of Edinburgh, and gained for him the Barbier prize of the French Academy of Science in 1868. This distinguished him as an investigator of the first rank, and determined the further course of his studies—on the properties and actions of drugs. In conjunction with Professor Crum Brown he has done much to demonstrate the relationship between the action of drugs and their chemical composition, and although further research along the lines they opened up has not proved so fruitful as was once anticipated, their work on the action of methyl on such alkaloids as strychnine will always remain classical. Within a year of graduation Dr. Fraser was appointed assistant to Sir Robert Christison, Professor of Materia Medica in the University, and remained in this capacity until 1870, when he became a lecturer on materia medica in the Edinburgh Extra-mural School, and an assistant physician to the Royal Infirmary. About this time he acted as examiner in materia medica and public health in the Edinburgh University, and in materia medica in the London University. On the death of Sir Robert Christison he succeeded to the Chair of Materia Medica in Edinburgh in 1877, and during twenty years of his professorship he acted as Dean of the Medical Faculty. As recipient of the Barbier prize he became a Laureate of the Institute of France. The Lords of the Admiralty chose him as one of the medical members of the committee to inquire into the outbreak of scurvy in Sir George Nares' Arctic Expedition, while his more recent appointment as President of the Plague Commission will be within the recollection of all. Besides those mentioned his contributions to practical medicine have been numerous, and he is perhaps best known as the introducer of strophanthus into the Materia Medica. For his work on this subject he received the Keith Prize of the Royal Society of Edinburgh. Ophthalmologists owe to him eserine, whose myotic qualities he discovered in his researches upon physostigmine. In later years his work on cobra poison, with the discovery of an antitoxin to which he has given the name antivenin, has brought him further credit. His eminence as an investigator, however, is almost rivalled by his skill as a teacher, and to few men who have learned materia medica from "the Dean" will the subject ever again appear dry and uninteresting. He is a deservedly popular Professor, and the honour which he has now received will be received with acclamation. Dr. Halliday Croom, President of the Royal College of Surgeons, is one of the best-known gynæcologists in Great Britain. He was born at Sanquhar, a small village in Dumfriesshire, in 1847, and, like so many other Scotsmen who have risen to fame, is "a son of the manse," his father having been a United Presbyterian clergyman. He graduated M.B. in 1868, and gained a gold medal for his M.D. Thesis in 1882. He began his professional career in Edinburgh in 1870 as assistant to the late Professor Laycock, and subsequently acted for some years as assistant to the present occupant of the Chair of Midwifery in the University of Edinburgh. Thereafter he began to lecture on Midwifery in the Edinburgh Medical School, and has continued doing so up to the present time. He has been a physician to the Maternity Hospital for twenty years, and only about a year ago did his term of office as physician for diseases of women to the Royal Infirmary expire. He has been President of the Edinburgh Obstetrical Society, and is now President of the British Gynæcological Society, an instructive paper by him on "Deciduoma Malignum," read before that Society, having appeared in our last week's issue. He is also a corresponding member of the Belgian Society of Gynæcology, and an Honorary Fellow of the American Association of Obstetrics and Gynæcology. He is a Fellow of both the Edinburgh Colleges, and was recently elected President of the Royal College of Surgeons. Dr. William MacEwen was appointed to the Chair of Surgery in the University of Glasgow in 1890. He has earned for himself world-wide renown as a surgeon, and no one who was present can forget the enthusiasm with which his address on Cranial Surgery (a subject in which he is a pioneer) was received at the British Medical Association meeting in Glasgow about twelve years ago. He is a native of Rothesay, and a graduate of the Glasgow University, where he took his M.B. degree in 1869 and his M.D in 1872. One of his first official positions was that of Casualty Surgeon to the Glasgow Central Police Office, and he subsequently became a Lecturer on Systematic and Clinical Surgery, and a Surgeon to the Glasgow Royal Infirmary and Sick Children's Hospital. In 1896 he was invited (and acceded to the request) by the University of California to deliver a series of lectures on Surgery. The work by which he is best known is his "Pyogenic Diseases of the Brain and Spinal Cord" and his book on the "Pathology of Osseous Deformities of the Legs," in which the operation for knock-knee with which his name is associated is described.

Arsenic in Health and Disease.

Since the calamitous but now classic outbreak of arsenical poisoning in the North of England from the drinking of contaminated beer (The Medical Press and Circular, Nov. 28th, Dec. 12th, 1900), much attention has been devoted to the study of arsenic in its relation to normal and morbid processes. Professor Gautier, in Paris, has for long contended that arsenic should be considered a normal constituent of human tissues, and it has been shown that it may be detected in many animals. The medico-legal bearing of this is clearly manifest. The matter is now receiving much attention in Paris. Dr. Delèpine has recently carried out a series of experiments in which rats were given arsenical beer and other arsenical solutions. Although of interest they are of but little importance in elucidating the action of "dietetic" and "medicinal" quantities of arsenic on man. On these points there is need for much research. In a recent number (The Medical Press and Circular, May 21st, 1902), we referred to the startling suggestion that the partaking of arsenical beer might be considered a factor in the increase of cancer. But if arsenic is a more or less constant constituent of soot, as is certainly the case when some forms of coal are used, there seems some reason in the further suggestion which has recently been made that the external irritation of "arsenicated soot" might play some part in producing epithelioma or "chimney-sweeper's cancer." Certainly, as is urged in this month's "Polyclinic," it behoves the British profession to bestir itself in the investigation of the arsenic question. We are pleased to note that the matter is to be further discussed at the Manchester meeting of the British Medical Association. A convenient summary of the chief clinical features of the recent outbreak of poisoning from arsenicated beer appears in this year's "Medical Annual." We hope many will adopt Mr. Hutchinson's excellent suggestion, and send any facts relating to the arsenic question to the Medical Graduates' College, where, we understand, there is an organisation for the collection and publication of information on the subject. The material now being collected by the Royal Commission should also throw much new light on the *role* of arsenic in health and disease.

A Gaelic Medical Manuscript of the Sixteenth Century.

The greater part of the last number of *The Caledonian Medical Journal* is devoted to an examination of "A Gaelic Manuscript of 1563." The original is deposited in the British Museum, and has been catalogued as "Additional 15,582." This interesting article is from the pen of H. Cameron Gillies, M.D., who, very evidently, treats his subject *con amore.* It is illustrated by a series of photo-lithographic reproductions of ten of the most important columns; and the tyro is further instructed by a page which gives the most frequent contractions employed by the scribes. As Dr. Gillies truly observes, anyone who can read the specimens thus furnished can read the whole manuscript, and, indeed, all other similar ones. He has come to the conclusion that "the book belonged without doubt to the remarkable family of Highland physicians named Beatons or Macbeths, who are so famous in the medical traditions of the West and North of Scotland." Like all medical treatises of the time, the substance of the text is, admittedly, *not original.* The "authority" of Hippocrates, Galen, Avicenna, Rhases and others is produced on almost every page. The origin of the contents of some few of the most important items has been traced by Dr. Gillies to John of Gaddesden and to Guy de Chauliac, from whose pages they have been almost literally transcribed. Unsavoury remedies derived from the animal kingdom are necessarily well in evidence; but, as Dr. Gillies truly points out, their application does not contrast unfavourably with that of the *animal extracts* and the *antitoxins* of the present scientific age. The writer also points out that the language must be described as Gaelic, and not Irish—being "nearly the language of Argyll and the West to the present day." We cordially thank Dr. Gillies for the treat which he has afforded us in the perusal of the results of this investigation.

The Electrical Resistance of Blood and Urine.

For the past few years Dr. Dawson Turner, of Edinburgh, has from time to time investigated the electric resistances of human blood and urine in certain diseases, and has drawn interesting conclusions from his results, and the contrast obtained in each case with the healthy normal standards. On February 25th, 1902, the resistance of the blood of a patient, æt. 51, suffering from pernicious anæmia, and under the care of Dr. A. James in the Edinburgh Royal Infirmary, was found to amount to 300 ohms only, instead of the normal 550. The resistance of the urine, which was tested at the same time, amounted to 88 ohms instead of the normal 45. Similar results were reported by this observer in the "Proceedings of the Royal Society of Edinburgh," December 21st, 1891. "Hence we have the striking fact that, while the urine contains too few salts, the blood contains an abnormal amount. The kidneys, then, must obviously, be in fault." The blood resistance in diabetes mellitus is high, as is that of the urine. We believe that there is an instructive future pathway of science thus opened up by Dr. Dawson Turner.

Hernia and the American Cartridge Belt.

From the far-off Philippine Islands comes the groan of the American warrior, and the surgical report of his professional guardian. The physical grievance is hernia; which is, we are told, "the commonest surgical condition that confronts the military surgeon in the Philippines." A predisposition to this incapacitating condition is soon furnished by the emaciation which nearly always follows exportation of the American citizen to those recently acquired insular territories. This is, of course, accompanied by general loss of muscular tone; and the lowered standard is too often more demonstratively stamped by attacks of diarrhœa, dysentery, enteric fever, and their collateral accompaniments and inevitable sequelæ. "But the chief causal factor, it is believed, lies in the army cartridge belt." This is worn around the abdomen, supported only by its own constriction above the hips. The obviously mischievous effects of such an arrangement are further emphasised by the fact that the abdominal belt is a very favourite item of costume with the masculine American. "Even in 'route marching'—except when carrying extra ammunition—the cartridge belt is seldom swung from the shoulders." In almost every other army the abdominal cartridge belt has been discarded: the resulting item of contrast speaks unfavourably for the usually practical bias of the transatlantic genius.

The King and the Medical Profession.

In this time of suffering for the King and sorrow for his people it is pleasing to remember that his Majesty has not only always shown himself a loyal patient, but has ever taken a profound interest in the advance of medical science, and has oftentimes gone out of his way to do honour to the medical profession, while to not a few members of the healing art he has extended many evidences of his gracious interest in their efforts to alleviate sickness and prevent disease. We venture to think that to members of the medical profession there have been opportunities for such near approach to the royal presence that the King has not only learnt the personal value of his "medical advisers," but has understood in a special way the importance of maintaining efficient medical service for his poor and dependent subjects. All know of his Majesty's deep and untiring interest in our national hospitals and his efforts to secure their financial welfare. The King has on several occasions shown his intimate knowledge of the value of scientific research, and urged the necessity of solving the mysteries which still baffle our efforts to stamp out such diseases as tuberculosis and cancer. It is well also to remember that the King has delighted to honour the profession by himself becoming an Honorary Fellow of the College of Physicians and an Honorary Fellow of the College of Surgeons.

The Function of the Vermiform Appendix.

Much discussion has taken place regarding the function of the cæcal appendix. Sir Frederick Treves, writing in 1890, spoke of it as "obsolete and out-of-date," and said, "It is safe to predict that in the intestine of the man of the future there will be no such structure found hanging from the cæcum." The general opinion has been in favour of considering it as a vestigial structure, as an embryonic remain, a remnant of the evolutional past. Dr. Kelynack, in his book on the Pathology of the Vermiform Appendix says:—"The vermiform appendix is a constant structure in man. This is not so in the higher animals generally. It is said to exist as a distinct process only in the gorilla, chimpanzee, orang, and gibbon among the higher apes; but is uniformly present in the wombat. It would seem that the appendix in man and these animals really represents the lower portion of the cæcum, which in many of the lower vertebrates is of considerable size. As supporting this opinion, it is interesting to note that the cæcum in the monotremes is also small and worm-like. In the lemuroids it is long and drawn out into a somewhat conical termination." The vermiform appendix is rich in lymphoid elements and Dr. R. J. A. Berry and others have sought to show that such structures may play the part of "a cæcal tonsil," and thus be of considerable functional importance in the intestinal economy. There is, however, no reason to believe that those persons who have suffered the loss of their cæcal appendix are thereby in any way subjected to gastro-intestinal disability, for, at least in this country, excision of the vermiform appendix is only performed when there is evidence that it is the seat of morbid processes.

Abuse of Narcotics and Hypnotics.

We are glad to notice that a warning note against the abuse of hypnotics has been raised and re-echoed by our transatlantic professional brethren. The land of most advanced views of liberty, of most rapid movement, and of keenest competition, has received, and we believe deservedly, the credit of producing the largest proportion of victims to the use of narcotic and hypnotic medicines. It is a necessary effect of the continuous and merciless over-pressure, under the influence of which the pilgrimage of life is performed in the great junior republic. Reports of startling individual cases ever and anon appear—as it were to warn the panting races for the goal of material "success" of the terrible dangers which beset their path. In a recent number of the Chicago *Medical Recorder*, Drs. Church and Hutchinson have called attention to the deplorable, and of the fatal, results of the reckless use of trional and sulphonal. In commenting on the same subject Dr. Arthur W. Rogers, of Wanwatosa, Wisconsin, tells us of a remarkable specimen of idiosyncrasy "in the case of a young man—a morphine *habitué*—who with suicidal intent took at one time 180 grains of trional. This young man had been excessive in every possible way. He had used cocaine and morphine in large doses for months; he had drank one to two quarts of whisky daily for some time, and had taken the 'gold cure' three different times." Still his record-making dose of trional "gave rise to no critical symptoms." Verily, verily, the ambition of our transatlantic cousins is comprehensive and many-sided!

Bacteriology of Puerperal Fever.

It is usually held that sapræmia in puerperal women is due to the presence of putrefactive organisms in the uterus and vagina, and septicæmia to a lymphatic or blood infection with streptococcus pyogenes. Though this is doubtless true in the main, yet it is seldom accurate, for a careful investigation of the lochia during sapræmia nearly always shows the presence of pathogenic bacteria, even though few in number, and on the other hand, many other organisms may be associated with the streptococcus in septicæmia, or may even cause it independently. In an interesting paper read before the recent Inter-Colonial Congress at Hobart, Mr. Aynlasy enumerates some of the bacteria found in relation to septicæmia. Thus he himself has seen two fatal cases where the infliction was due to the colon bacillus, and out of 179 cases of puerperal fever investigated by Krönig, the gonococcus was found in fifty. Staphylococci have often been found in some, and among other organisms present have been the diphtheria bacillus, Frankel's pneumococcus and Welch's gas bacillus. From one case at the John Hopkins Hospital no less than four distinct bacteria were isolated — streptococcus, staphylococcus aureus, typhoid bacillus, and a gas-forming anaërobe. In practice an important point is that since antistreptococcic serum is useless where the infection is not that of the streptococcus, its apparent failure in so many instances is due to the fact that the infection is that of some other organism.

South Africa and Medical Practice.

Peace is the beginning of vast prosperity for South Africa. Even as we are now gladly welcoming the returning warriors, farewells are being said to the outgoing workers. At first hardships and possibly actual suffering will have to be borne by many. But the hope of future benefit will stop present grumbling. Already many young medical men are looking to South Africa as to a land of promise. A distinguished professor recently informed his students that he believed a great South African University would arise, with perhaps its centre at Pretoria, where there would be formed a great medical school. He showed that we were too crowded at home; that we were starving one another; that the rigid etiquette met with everywhere was due to the overcrowded condition of the profession at home, and he urged that there would be great openings for those men who cared to keep their eyes open. All this is no doubt in great measure correct, but we venture to urge the necessity for wise caution and delay in hasty procedure, especially to those who have neither friends nor funds. South Africa is but at the beginning of the making, and it is necessary for its prosperity that selfish aims should as far as possible be set aside, and that we send of our best to play a part in the building of this great land. In any case we trust medical men will uphold the highest traditions of the profession in South Africa, and maintain the highest code of ethics.

Hydatid Disease of the Lung.

Fortunately in this country hydatid disease of the lung may be considered a rarity. But this is not so in Australia. Dr. A. A. Sendon, of Adelaide, has recently published a valuable monograph on the subject, in which he shows it is possible to recognise several stages in a typical case of hydatid cyst of the lung. First, there is the period of latency marked by an absence of symptoms or by indecisive evidences, and sometimes ending in retrograde changes. Later, physical signs may be apparent, and the cyst may assume enormous proportions. The natural tendency is to rupture and expulsion of the contents. The ruptured cyst sometimes passes into a period of quiescence, and it may even become obsolescent. Often, however, expectoration of the mother cyst occurs. The patient may die of impaction of fragments of membrane in the glottis, may succumb to hæmorrhage, or may recover with a potential cavity. Unfortunately, in many serious sepsis occurs. Even after expulsion of the hydatid membrane the empty lung cavity may never altogether contract and lead to further complications. It is well that attention should be drawn to the pathology of hydatid disease of the lung, especially at a time when the visits of Colonials to this country are becoming more and more frequent, and when also we are realising that the old country should be made first acquainted with the nature of all morbid affections occurring in every part of the Empire.

The Straight-Fronted Feminine Corset.

Woman is nothing if not thorough. The main principle of her dress has always apparently been the exaggeration of facts, carried to an extreme degree, and then, as a rule, suddenly and absolutely abandoned. For instance, Nature has endowed shapely woman with an exquisite inward curve of the sides of the body above the hips. That "line of beauty," the phrase which Hogarth invented, probably with an eye to that particular curve, lovely woman has always spent her utmost ingenuity in endeavouring to improve. That weapon of torture, the modern corset, needless to say, has received the unsparing condemnation of all scientific authorities upon health and beauty. In spite of damaged organs and shortened lives, however, woman has insisted upon her own standard of beauty so far as "figure" is concerned, namely, that the test of excellence is one of size. Mere shapeliness as that of the Venus of Milo, does not count, for contour, as things go, is made to order by the milliner, and woman can defy the freaks of Nature with the aid of the *corsetière*. The latter ingenious craftswoman has now put the crowning touch on the virtues of the corset by decreeing that the front must be straight. In other words, the lower part of the abdomen, which hitherto has been allowed to keep a curved contour, capable of adapting itself to the varying capacity of the abdomen, is now to be straight as a plummet-line. This last vagary would be ludicrous were it not an outrage upon common sense and at the same time a wanton damage to female health.

The Regulations of the Madrid International Medical Congress.

In commenting upon the difficulties attending the organisation of the International Hygiene Congresses we have mentioned the lack of any means of restricting participation in these meetings to persons possessing some sort of scientific qualification, the absence whereof seriously threatens the success of these Congresses. In the International Medical Congresses, at any rate, some guarantee has been afforded that members are qualified medical men, but this salutary rule has been set aside by the organising committee at Madrid. We learn, indeed, that the membership will be extended to doctors, pharmaceutical chemists, dentists, veterinary surgeons "and other persons engaged in the practice of the various branches of medical science," and, as if this latitude were still too restrictive, admission is also accorded to persons "in possession of a scientific or professional title and to representatives of the press," that is to say, all the world and his wife. It follows that the Madrid Congress will not, like its predecessors, be a medical meeting exclusively composed of medical men, and it thus forfeits its distinctive character. We cannot but think that this departure from time-honoured precedent will jeopardise the success and the continuity of these international gatherings. The only object which the organisers can have had in view in thus violating the fundamental principle of these meetings must have been to increase the number of subscribing members, but in so doing we are convinced that they have been singularly ill-advised. Medical topics are ill-suited for debate before an audience largely composed of non-medical persons, whose presence is likely to have a deterrent effect on many medical would-be adherents.

The New Charing Cross Hospital Buildings.

The laying of the foundation stone of the new buildings at the Charing Cross Hospital suggests some comments as to the advisability of such structures, When complete the hospital will consist of a large roughly triangular, block with a well in the centre. What would happen in such a building in case of fire is a question that demands careful consideration. From recent experiences we know that the fire escapes provided by the Metropolitan Fire Brigade may fail to reach the upper floors at all. It would be useless to provide roof exits, for there would be no neighbouring roofs upon which to take refuge. It would be interesting to know what steps have been taken by the Charing Cross Hospital authorities to secure proper structural exits for persons inside the building in case of fire. It would be still more interesting to learn whether the Fire Brigade or the London County Council have inspected the building and made any suggestions as to fire extinguishing and life-saving appliances. A hospital requires no less protection than a theatre, but we doubt if the authorities take much, if any, trouble as regards the collections of sick people, although of late years they have looked more or less after the theatres. Some day a fire in a big hospital will awake the nation to a sense of their responsibilities in the matter.

The Diagnostic Value of Pupillary Changes.

In the course of investigations made with the object of determining the relationship between pupillary changes and the existence of syphilis, tabes and general paralysis, Dr. Dufour, of Paris, found that inequality of the pupils is a condition which, in the majority of cases, appeared to stand in no relationship to syphilis or to either tabes or general paralysis. The diagnostic importance of this abnormality is, therefore, small. Irregularity of pupil, on the other hand, justifies the assumption of a previous syphilitic infection or of the existence of one or other of the para-syphilitic diseases mentioned above. He never met with the Argyll-Robertson pupillary reaction except in conjunction with syphilis, tabes or general paralysis. It follows that the latter sign is one of considerable practical value, indicating as it does a functional disturbance of the posterior columns of the spinal cord, though this, it must be remembered, is not always of syphilitic origin.

Medical Service of Intercession for the Recovery of the King, St. Paul's Cathedral.

A SHORT special service of intercession has been organised by the Guild of St. Luke, at St. Paul's Cathedral, for this evening, July 2nd, at 7.30, on behalf of the whole medical profession. Admission to the space under the dome will be by tickets only. Tickets will be sent to all medical practitioners resident in London, and other doctors wishing to attend are asked to apply to the Registrar of the Guild, 24, Somerset Street, Portman Square, W. In order to make the service a public corporate act of intercession on behalf of the profession robes will be worn. It is intended to send a respectfully-worded message of sympathy to the Queen on behalf of those attending. The spirit of the service may be gathered from the text at the head of the invitations, "For they shall also pray unto the Lord that He would prosper that which they give for ease and to prolong life."

The Study of Altitude.

THE influence of altitude on physiological processes is well recognised. The importance of high health stations has long been known and many of the most renowned sanatoria are in elevated districts. The rarefied atmosphere of certain resorts is undoubtedly a factor of much value in the treatment of some cases. Blood changes and tissue alterations occur when a patient is transferred from low to high places. Even serious functional derangement is brought about by a quick passage to positions of high altitude. But much of our knowledge is fragmentary and all is incomplete, and we are therefore particularly glad to see that Professor Angelo Mosso has obtained from Queen Marguerite of Italy the use of her beautiful châlet on Mont Rosa, at an altitude of 13,000 ft., as a physiological laboratory for the study of the influence of rarefied natural air and altitude on animal life.

Travel as a Prophylactic Agent.

AT a time when the thoughts of many are turning to holidays, and many minds are preparing for tours, and extensive arrangements are being made for travel, it is well that the importance of travel should be clearly recognised not only as an educational advantage and delightful pastime, but as a most valuable prophylactic agent. If such a conception was more frequently recognised we venture to think that holidays would prove of much greater service in the maintenance of health and prevention of disease. Unfortunately the touring ground or holiday resort is only too often selected merely in accordance with fashion, caprice, or convenience, and with no clear idea of the value which judiciously selected and wisely planned travel is capable of accomplishing in strengthening mental and bodily powers.

THE Cremation Bill has passed "the Lords," and will probably have a safe journey through "the Commons," and so pass into law.

A SUICIDE epidemic is said to be prevailing in France, no fewer than twenty-four persons having taken their lives during a period of three days.

AN international golf match is being arranged for during the gathering of the British Medical Association at Manchester, and will be played on August 1st.

A SOCIETY has been formed in Germany for the prevention of venereal diseases on the lines of similar organisations for the elimination of tuberculosis and alcoholism.

THE annual temperance breakfast to members of the British Medical Association will be given by the National Temperance League at Manchester on Thursday morning, July 31st.

PERSONAL.

DR. STCLAIR THOMSON has been elected a corresponding member of the American Laryngological Association.

ON Thursday, June 26th, the Duke and Duchess of Aosta paid a visit of inspection to the Italian Hospital in Queen Square.

SIR CHARLES WYNDHAM, our new "knight-actor," once studied medicine, and during the American Civil War he served on the medical staff of the Federal Army.

IT is said that Major Ronald Ross, F.R.S., has declined the superintendency of the department of Tropical Medicine at the Jenner Institute of Preventive Medicine.

PRINCESS LOUISE to day (Wednesday, July 2nd) lays the foundation stone of the new building of the Victoria Hospital for Children, and will afterwards be present at the fête in the grounds of Chelsea Hospital.

SIR HENRY FREDERICK NORBURY, M.D., K.C.B., Director-General of the Medical Department of the Navy, has been Gazetted an Honorary Surgeon to His Majesty.

IT is particularly pleasing to the members of the medical profession to find that among the first holders of the new "Order of Merit" is Lord Lister. Scientists have also received due recognition in the persons of Lord Rayleigh, Lord Kelvin, and Sir William Huggins.

DR. JAMES MURRAY, late Medical Officer of the Prison at Wakefield, has been appointed Medical Officer of H.M. Prison at Birmingham. On leaving Wakefield he has been presented with various "tokens of affection and esteem" by his friends—presumably not by his patients.

THE CORONATION HONOURS.

The list of Coronation Honours, which was published on Thursday last, in spite of the disastrous circumstances necessitating the postponement of the Coronation ceremonies, is a long one, but the medical profession as a whole have every reason to be gratified with the distribution of titular distinctions, in respect of both number and selection.

Lord Lister has been made a member of his Majesty's Most Honourable Privy Council, and has been appointed a member of the new "Order of Merit."

Sir Frederick Treves, K.C.V.O., C.B., F.R.C.S., and Sir Francis Laking, K.C.V.O., M.D, have had baronetcies conferred upon them.

Among the Knights are :—

J. W. Collins, M.D., F.R.C.S.
Alfred Cooper, F.R.C.S.
Halliday Croom, M.D., President of the R.C.S.Ed.
Thomas Fraser, F.R.S., M.D., President of the R.C.P.Ed.
Victor Horsley, F.R.S., F.R.C.S.
H. G. Howse, President of the R.C.S.Eng.
Professor W. MacEwen, F.R.S., F.R.C.S.
Isambard Owen, M.D., Deputy Chancellor, University of Wales.
Thomas Myles, M.B., F.R.C.S.
William Whitla, M.D.
A. Conan Doyle, M.D.

Sir William Church, Bart., President of the R.C.P. Lond., has been appointed Knight Commander of the Order of the Bath.

The Hon. Frederick W. Borden, M.D., Minister of Militia, &c., of Canada, has been appointed Knight Commander of the Order of St. Michael and St. George.

In the Indian Services the Kaisar-i-Hind Gold Medal has been bestowed upon Capt. T. W. A. Fullerton, M.D., and Lieut.-Col. John L. Poynder, both of the Indian Medical Service, and Edgar Thurston, L.R.C.P., Superintendent of the Government Central Museum at Madras.

Order of the Bath.

Have been appointed in the Order of the Bath (Second Class, Military Division) :—

Inspector-General of Hospitals and Fleets J. D. Macdonald, M.D., R.N. (retired).
Surgeon-General John A. Woolfryes, M.D., C.B., C.M.G., Hon. Physician to the King.
Surgeon-General Annesley C. C. de Renzy, C.B, Indian Medical Service (retired).
Surgeon-General William Taylor, M.D., C.B., Hon. Physician to the King.

Third Class—Military Division.

Fleet-Surgeon James Porter, M.D.
Lieut.-Col. Patrick F. O'Connor, Indian Med. Service.
Lieut.-Col. Sir James R. A. Clark, R.A.M.C. (Militia).
Lieut.-Col. G. T. Beatson, M.D., R.A.M.C. (Volunteers).
Col. J. D. Edge, M.D., R A.M.C.
Lieut.-Col. W. A. May, R.A.M.C.

Second Class—Civil Division.

Duncan Hilston, M.D., Inspector-General of Hospitals and Fleets (retired).
Robert Grant, M.B., Inspector-General of Hospitals and Fleets.

Distinguished Service Order.

Lieut.-Col. H. J. McLaughlin, M.D.
Lieut. Col. C. E. Nichol, M.D., R.A.M.C.
Major H. A. Thompson, M.D., R.A.M.C.
Major W. H. W. Elliot, M.B., Indian Medical Service.

Companions of the Order of St. Michael and St. George.

Lieut.-Col. H. Charlesworth, R.A.M.C.
Major W. G. Macpherson, R.A.M.C.

Special Article.

A FORGOTTEN MEDICAL WORTHY.

By George Foy, M.D., F.R.C.S.

One of the bravest and most accomplished of the adventurous seamen who went forth to war against Spain in the South Sea was Surgeon Lionel Wafer, the principal medical officer of the company of privateers that followed William Dampier and afterwards the still more famous Davis. Of his parentage and place of birth nothing is known with any certainty, and it is no more than an approximation to the truth to fix the date of his birth in 1660. From his own writings we know that he "was still young" when in 1677 he shipped as surgeon's apprentice to the surgeon of the *Great Anne*, of London, under Captain Zachery Browne, bound for the West Indies. In the *Great Anne* he visited Java, Sumatra, and Malacca. When in Bantam, Batavia, he was on shore when the ship sailed for England. He got a passage home, and arrived in England in 1679. Soon afterwards he shipped for the West Indies as surgeon's mate, and on the arrival of the vessel at Jamaica he deserted, going to join his brother, who was an overseer of a sugar plantation of Sir Thomas Mogford. He commenced practice as a surgeon at Port Royal, and some three months after was persuaded by Cook and Lynch to join their expedition against the Spaniards. Shortly after Christmas the privateers, commanded by Cook, Lynch, Sawkins, Coxon, and Sharp, sailed for the bay of Nombre de Dios, and at the Bastimantos met with Dampier, and, in his own words, "having mustered our forces at Golden Island, and landed on the isthmus, we marched overland and took Santa Maria, and made those excursions into the South Sea which Mr. Basil Ringrose relates in his history." The company numbered some 350 men, and they arrived at the shore of the Pacific Ocean, on which they launched in Indian canoes and periagoes. They were fortunate enough to capture a Spanish vessel, and in her they stood away to the southward as far as Juan Fernandez. Sawkins was dead, and his successor Sharp was deposed by Watling. Dissensions broke out. Dampier, Wafer and others were dissatisfied with Sharp, and took to the long boat and the canoes and made for the isthmus of Darien, "choosing to go back again a toilsome journey overland, than stay under a captain in whom we experienced neither courage nor conduct." The company following Dampier and Wafer consisted of forty-four white men, who bore arms, a Spanish-Indian, who bore arms also, and ten Mosquito-Indians. They landed at Cape Lorenzo, and sunk their boats and began their march across the difficult country, directing their course by their pocket compasses. The difficulties they had to encounter were very great, the isthmus chiefly consisting of pathless forests, deep rivers, torrents and mountains of the rudest description. During the greater part of their journey the rain descended in torrents, making the rivers and even the brooks impassable, and frequently obliging them to stop. At one of their halts, made to dry their clothes, firearms and ammunition, Wafer, was sitting on the ground near a man who was drying some gunpowder on a silver plate, who carelessly allowed it to get overheated. The powder exploded and scorched Wafer's knee to that degree that the bone was left bare, the flesh being torn away and the thigh burnt for a great distance above it. This dreadful accident took place on May 5th, 1681, and for a few days afterwards Wafer made shift to get on. The company allowed him a slave to carry his things, "being," as Dampier writes, "all of us the more concerned at his accident because liable ourselves at every moment to misfortune, and none to look after us but him." On the fifth day the slaves ran away, and the negro appointed to attend on him made off with his medicine chest, clothes, and so forth. He now took leave of his companions, and "set up his rest among the Darien Indians." But he was not left friendless, "for there staid with him one Richard Jopson, who had served an apprenticeship to a druggist in London; he was an ingenious man, and a good scholar; he had with him a Greek Testament, which he frequently read, and would translate into English to such of the company as were disposed to hear him." As he had no medicines, and as his wounds were very painful, he put himself in the hands of the natives, as did three wounded sailors who had also remained behind, who undertook the cure, and effected it in twenty days, by daily applying "some herbs which they first chewed in their mouths to the consistency of a paste, and putting it on a plantain leaf, and laying it upon the sore." In other respects the Indians were not so kind, only throwing him and his companions unripe plantains for food, "as you would throw bones to a dog." Some of the tribe had gone with Dampier as guides, and the Indians feared these guides had met with foul play, for they had not returned within the time they were looked for. One morning they prepared a great pile of wood, and told Wafer that he and his companions must expect to be burned on it when the sun went down, if the guides were not returned. At this time Lacenta, the chief of the Indians, happened to pass that way, and dissuaded the enraged people from their purpose. Wafer and his companions were then sent with two Indians to the Atlantic coast, but the Indians left them in the woods, where for eight days they wandered, feeding on berries and roots, and at last they found a track out of the woods, which, however, led them into the very camp they had left. But the guides had returned to their tribe, and Wafer and his companions were welcomed and hospitably entertained, and then conducted to the camp of their chief, the merciful Lacenta. It was the rainy season, and the chief detained them until the dry season commenced. During this interval the surgical ability of Lionel Wafer raised him to the highest honours Lacenta could bestow. One of the chief's wives fell sick and bleeding was prescribed. Wafer thus describes the Darien Indian mode of venesection:—"The patient is seated on a stone in the river, and one with a small bow shoots little arrows into the naked body of the patient, up and down, shooting them as fast as he can, and not missing any part, but the arrows are gagged, so that they penetrate no further than we generally thrust our lancets." Wafer, seeing the Indian method caused the patient much pain, volunteered to bleed the lady, which Lacenta consented to; but after the incision made by the lancet, when the chief saw the blood spout out in a stream, instead of falling drop by drop as it did in their method, he laid hold of his lance, and swore by his teeth (the most solemn of their oaths) that if his wife did not recover he would kill him. It was seen, however, that the stranger's mode of bleeding was better than their own, and when his wife recovered from her fever, Lacenta came, and before all his train bowed and kissed the surgeon's hand. Then writes Wafer: "The rest came thick about me, and some kissed my hand, others my knee, and some my foot; after which I was taken up in a hammock and carried on men's shoulders, Lacenta himself making a speech in my praise, and commending me as much superior to any of their doctors. And thus, afterwards, I was carried about from plantation to plantation, and lived in great splendour and repute, administering both physic and phlebotomy to those that wanted." Luckily for Wafer, he had a case of instruments wrapped up in an oilcloth and in his pocket when the negro decamped with the rest of his effects. Lacenta now was unwilling to allow Wafer to leave them, and it was only by promising to go to England and return with a pack of hunting dogs that the surgeon got away. An Indian escort of seven stout men was then granted, and four women to carry provisions. His wardrobe was sadly reduced, consisting only of "a linen frock and a pair of breeches." "These," he says, "I saved to cover my nakedness if ever I should come among Christians again, for at this time I went naked as the savages, and was painted by their women." He eventually reached the coast and was taken on board an English sloop at Le Sounds Key. In one of these ships was Dampier, with many of their old companions in the South Sea and in the disastrous journey across part of the isthmus. The four seamen, not being honoured like the surgeon, were probably not disguised by paint and Indian ornaments, they were presently recognised and heartily welcomed by their old shipmates. "But I," says Wafer, "sat awhile cringing upon my hams among the Indians, after their fashion, painted as they were, and all naked but only about the waist, and with my nose piece hanging over my mouth. I was willing to try if they knew me in this disguise, and 'twas the better part of an hour, before one, looking more narrowly upon me, cried out, 'Why, here's our doctor!' and immediately they all congratulated my arrival among them." In his diary he writes: "Foreseeing a necessity of wading through rivers frequently in our land march, I took care before I left my ship, to provide myself a large joint of bamboo, which I stopped at both ends, closing it with wax so as to keep out any water. In this I preserved my private and other writings from being wet through. I was often forced to swim." He was with Dampier in the sloop for some months in the West Indies. He again joined Dampier in Virginia, in August 1683, and with Cook sailed for Africa and the Pacific. After Cook's death Wafer remained with Davis and returned with him to the West Indies, where they received the King's pardon. Returning to England in 1691, he settled down in London where he is supposed to have died in 1705.

It has been well said that to the accidental detention of Lionel Wafer, we are indebted for one of the most interesting accounts of savage life that has ever been written—one of the most delightful books.

It should also be remembered that he saw how much the possession of Central America would facilitate communication with the East Indies, and in 1704, in the second edition of his book, with a dedication to the Duke of Marlborough, he makes a strong appeal to the Government to make a settlement on the isthmus whereby, among other advantages, "A free passage by land from the Atlantic to the South Sea might easily be effected, which would be of the greatest consequence to the East India trade."

It is much to be regretted that the work has not been reprinted in England; translations in almost every European language have appeared, and yet to English readers Wafer's book is unattainable, even though he has been the Livingstone of Central America.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

ON THE PROMPT CURE OF ECZEMA, SYCOSIS IMPETIGO, AND ALLIED DERMATOSES BY FORMALIN.

To the Editor of The Medical Press and Circular.

Sir,—No doubt many of your readers have cases of impetigo and of sycosis under their care. Both of these diseases are prone to attack the face. They are very disfiguring, and both at times prove to be extremely intractable. I feel sure, therefore, that the suggestion of a safe and prompt remedy will be welcomed.

First, as to *impetigo contagiosa*. Both the streptococcus and the staphylococcus have been found to be present. The latter is undoubtedly the true causative agent, as indeed it is of *sycosis vulgaris* or *coccogenica*, the commoner of the two chief varieties of barber's itch. Dr. Sabouraud, of Paris, a dermatologist of the very highest reputation, stated at Cheltenham last year that sulphur, cade oil, and mercury are the best germicides for destroying the staphylococcus. But there is a far more reliable germicide than these; it is formaldehyde. See the remarkable series of experiments of Slater and Rideal (*Lancet*, April 21st, 1894, Vol. I, p. 1,004.) Formalin, which is a somewhat unstable solution of formaldehyde, varying from 35 to 40 per cent., appears to be not only a germicide but a reliable antitoxic, somewhat resembling salicylic acid, but more vigorous in its action. Glutol, which is a loose combination of formaldehyde and gelatine, occurs as a non-poisonous white powder, largely used by surgeons for dusting over a foul ulcerating surface in order to cleanse it and to control suppuration. In any form of facial pustulation, glutol may be freely applied to the skin, say, after each meal; in this kind of case vaseline and greasy preparations are strongly contra-indicated. Washing and fomenting are to be strictly forbidden, as these favour the growth and spreading of the coccus. Glutol has this decided advantage in the case of children, that it is not poisonous, even if introduced into the mouth. A convenient formula for ordinary examples is:—

Glutol, ʒj;
Pulv. Talci ad, ℥j.

Some surgeons order undiluted glutol in very severe cases of suppuration. In prescribing for skin disease, however, nothing like so strong a preparation is needed. For Slater and Rideal found that the development of *S. pyogenes aureus* is much delayed by so incredibly minute a trace as 1/20,000! whilst the microbe, when exposed to the action of 1 per cent., *perished in less than one hour!* I have used formalin in the various dermatoses induced by the staphylococcus, and have been greatly gratified by its prompt and permanent action. My clinical rule is, for *dry* eczema use *wet* formaldehyde; for *wet* eczema use *dry* formaldehyde, *i.e.*, glutol.

Among the oozing dermatites, in which it is useful, are *eczema madidans, impetigo, orificial pruritus,* and *sycosis vulgaris.*

Among the dry varieties are *ecthyma, eczema foliaceum,* and *erythema siccum.* All usually induced by the same coccus, viz., *S. pyogenes aureus.*

A distinct improvement is visible next day if this remedy is going to do any good. I can strongly recommend it to my professional brethren.

Finally, in that very troublesome condition, *pruritus ani* of the aged, I have seen great and immediate relief obtained by the following formula:—

Formalin, ♏5;
Liquor thyroidei, ʒj;
Ceratum Galeni (cold cream) ad ℥j.

I am, Sir, yours truly,
Edward Blake, M.D., M.R.C.S.Eng.
Berkeley Mansions, Hyde Park, W.

BROOKS ON "THE ELEMENTS OF MIND."

To the Editor of The Medical Press and Circular.

Sir,—In your review of my book "The Elements of Mind," the reviewer says:—"His first original (?) observation is that vices and virtues differ not so much in kind as degree, so that virtue may, under given circumstances, become a vice and *vice versa.* Well, that is hardly an acquisition to our knowledge, and had our author read even a little he would not have been at the pain of discovering the platitude."

Will you permit me to say, in justice to myself, that I made no claim to originality with respect to the above, and if you will turn to p. 4 of my book you will find these words:—"I do not claim originality for the idea (in the Prologomena) that there is no evil in man's nature, and that good is only the mean between two extremes, for Aristotle advances a very similar conception." I am, Sir, yours truly,

H. Jamyn Brooks.
17a, Radnor Place, Hyde Park Square, W.
June 28th, 1902.

GARLIC IN PHTHISIS.

To the Editor of The Medical Press and Circular.

Sir,—The offensive odour of garlic and other plants of the onion family has been urged as a drawback to the use of this remedy, if remedy it be, in consumption. I would point out that parsley, if taken at the same time, very greatly mitigates the characteristic emanations, and I would suggest its use by those who are giving, or propose to give, this method a trial.

In making this suggestion, I do not wish to convey the idea that I consider this treatment—or any other—likely to prove of permanent benefit in such a disease as phthisis; indeed, the laudation so readily bestowed upon these various "treatments" seems to me to savour of mediævalism—of a time when drugs were everything and the *vis medicatrix naturæ* nothing.

I am, Sir, yours truly, M.D.

Literature.

FOX'S ATLAS OF SKIN DISEASES. (*a*)

This valuable and interesting work has been undertaken on new lines, namely, that of coloured photography. The results are on the whole excellent, although here and there are affections of the skin that obviously do not lend themselves to that form of artistic representation. In the treatment of diseases of the skin a correct diagnosis is a matter of vital importance, and in no other branch of medical work is the diagnostic faculty more dependant upon objective appearances. Hence the generally recognised value of illustrated atlases as an aid to the study of dermatology. In some cases a careful inspection of Dr. Fox's beautiful plates could not fail to leave a lasting and complete record upon the mental retina of the student. No one, for instance, could mistake a case of herpes zoster after a careful study of the lifelike illustration of shingles. Another striking picture is that of urticaria graphica, in which the word "urticaria" is seen written in a raised wheal across a patient's shoulders. Dermatitis venenata resulting from the use of chrysarobin is likely not only to give a good visual representation of the occasional violent irritant results of that drug when applied to the skin, but also to impress one with a due sense of the risks attached to the use of that drug. A good idea is afforded of the multiform and widespread lesions caused by scabies in a child. In the last-mentioned plate the details are better seen with the help of a magnifying glass. In all Dr. Fox has selected a hundred different typical diseases of the skin for illustration. He has supplied a clear and concise text description of each malady and its appropriate treatment. In this part of his work he has shown some originality, and has kept in view the wider aspects of medicine involved in dermatological practice. The Lippincott Company may be congratulated upon the excellent tone and appearance of this publication, which should be on the bookshelf of every dermatologist.

ANTENATAL PATHOLOGY. (*b*)

Professor Ballantyne's book is, perhaps, the most important medical work which has appeared during the past year. The author has tackled a subject which, though by no means new to him—for he has worked at it for twenty years or more—is almost untouched by medical writers. And, as a result of his labour, the medical profession has placed before them an original work of great merit and of extreme practical importance. Professor Ballantyne had hoped to have been able to present to his readers in one volume the whole subject of antenatal pathology and hygiene, but, as perhaps might have been expected, he found that it was impossible to do so and at the same time to accomplish his desire of exhaustively discussing his subject. In consequence, in the present volume, he deals exclusively with fœtal physiology and pathology, and he has left the subjects of teratology and morbid heredity for a companion volume.

The volume before us contains two books. The first of these deals with the subject of "antenatal in relation to postnatal and neonatal pathology," and the second with "the pathology and hygiene of the fœtus." In short it contains blended into a homogeneous form Professor Ballantyne's former work on this subject—work which has been already to some extent laid before the medical world in some two hundred and odd communications, and which is now supplemented by reference to the work of others which has appeared in contemporary literature. In the first book, the birth and gradual growth of antenatal pathology are traced, and its relation to other

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(*a*) "Photographic Atlas of the Diseases of the Skin." By George H. Fox, M.D. In Sixteen Parts. Philadelphia and London: Lippincott Company. 1901.

(*b*) "Manual of Antenatal Pathology and Hygiene: The Fœtus." By J. W. Ballantyne, M.D., F.R.C.P.E., F.R.S.Edin., Lecturer on Midwifery and Gynæcology, Medical College for Women, Edinburgh. Edinburgh: William Green and Sons. 1902. Pp. 527; 14 coloured plates and 55 figures).

branches of study—general pathology, biological sciences, &c., and its effect on neonatal pathology are discussed. In the second book, the anatomy and physiology of the fœtus are first discussed, and then the wide subject of fœtal pathology. The chapters which deal with the last named subject are to our mind the most important in the book, and in his endeavour to clear up and to systematise it, the author has done an essential service to medical science. Space forbids us to enter into a discussion on the many points which are raised, and indeed, even if there was space, it would be a venturesome reviewer who would tackle the author on his own ground.

There are many excellent illustrations, and those of fœtal ichthyosis are especially good. To the cases which Professor Ballantyne relates, we may be pardoned for adding one, which occurred in our own practice, in which the fœtus was born alive and very closely resembled that portrayed in Fig. 36. The mother was quite free from any form of skin disease. It was her second pregnancy, but the first had terminated in the occurence of a three months' abortion. The fœtus only lived a few hours.

Professor Ballantyne's work is essentially a work of reference, and for this reason we cannot consider the term "manual" a suitable one by which to designate it. A "manual" on any subject connotes a work in which a due proportion is observed between the practical importance of the subject discussed and the time which the average reader can devote to the study of that subject, The work before us pertains more closely to the nature of a treatise, in which every object is subordinated to the importance of presenting the fullest possible description of the subject. Whether Professor Ballantyne's work would be of greater value to the average reader if it partook more of the nature of a manual, is a matter into which we shall not enter. However that may be, it is a perfect work of reference for the specialist.

The companion volume, which, we trust, will soon appear, will be looked for eagerly by all who have studied the present volume. An instructive—we use the term advisedly—work on teratology has long been wanted, and if there is any medical writer who can produce such a work it is Professor Ballantyne.

A word of praise is due to the publishers for the excellent manner in which the present volume has been turned out. Paper, illustrations, and type are all alike as good as could be, and that, we regret to say, is not a compliment which can be paid to all British medical works.

ESSAYS BY THE LATE SIR JAS. PAGET, BART. (a)

WE are indebted to Mr. Stephen Paget for collecting and publishing under one cover selected essays and addresses of his father, the late Sir James Paget, Bart.

The volume should be read by every medical practitioner, containing as it does a vast amount of information of a kind one does not meet with in text-books, but which is essential for successful practice.

We have here in his own clear words, a description of that disease of the nipple which is associated with his name; the "stammering" of various organs; neuromimesis, and osteitis deformans.

The chapter on sexual hypochondriasis will not afford any satisfaction to a morbid curiosity, but will well repay the careful perusal of every medical practitioner, containing information derived from an unrivalled experience and keen observation, which will be an invaluable help in answering and advising on the innumerable questions raised by hypersensitive patients. These are matters of the utmost importance, but of the greatest difficulty; they are not dealt with in ordinary text-books, yet are constantly cropping up in study practice; in dealing with them experience is necessary, and we have that of many years, condensed here in a few short, lucid passages.

If we qualified our praise of the book at all, it would only be a slight regret that some few papers of a more or less popular nature are bound up with a majority which are essentially scientific. These, however, will be welcomed by many as affording a variety of reading and food for thought off the hard direct lines of pure medicine.

Medical News.

National Society for Employment of Epileptics.

A GARDEN PARTY will be held at the Colony for Epileptics, Chalfont St. Peter, Bucks, on Wednesday, July 9th, in order to afford an opportunity for visitors to see the colonists and their surroundings under every-day conditions. To this end it has been so arranged that during the earlier part of the afternoon (till 4.30) the colonists will be engaged in their usual work in the farm, the gardens, and the workshops, after which a cricket match and various other games will be played, and the Colony band will perform a selection of music.

A Locum Tenens Sentenced.

J. CREAN, *alias* William Waddell More, who, as already stated, was under remand on a charge of stealing jewellery from his principal at Bridlington (Yorks), was last week sentenced to three months' hard labour at the Petty Sessions.

An Edinburgh Tragedy.

MR. W. IVESON MACADAM, Professor of Chemistry at the Royal College of Surgeons, Edinburgh, was shot dead by a porter of the institution on the 24th ult., and his assistant, Mr. James Ray Forbes, received a fatal wound. The murderer was subsequently arrested.

British Medical Association Meeting.

WE are asked to announce that a meeting of members of the Association will be held in London, at St. Martin's Town Hall, on Tuesday next, at 8.30 p.m., "to take into consideration what action shall be adopted towards the Reconstitution Report and the disabilities it will inflict on the general body of members." These are:—Deprivation of powers now possessed through the annual meeting, and deprivation of sufficient representation through the branches, and the large increase of subscription.

Pass Lists.

University of Dublin (Trinity College).

School of Physic.—The following passed the Final Examination during Trinity Term, 1902 (Section A), arranged in order of merit:—Michael J. M'Auliffe, Henry Stokes; Herbert Stone, Douglas B. Thomson (æq.); Thomas C. A. Sweetnam; Harold T. Marrable, Philip S. Stewart (æq.); Frederick W. Bury, James F. F. Walsh, Cecil J. Wyatt; Thomas King-Edwards, George S. Walton (æq.); Thomas Ryan.

School of Physic.—Class Examinations, June, 1902—Practical Histology—First prize: H. English, 78½ per cent.; Second prize: J. Pringle, 76 per cent. First-class honours: G. M. Millar, 73·1·3 per cent. Honours: W. J. Powell, 69 per cent.; G. E. Nesbitt, 68 per cent.; M. D. Ferguson, 66 per cent.; A. G. Alexander, 65 2·3 per cent.; J. W. Burns, 64 2·3 per cent.

TRINITY TERM, 1902.

The following is the result of the Medical School Sizarships Examination:—

Half M.B.—Botany and Zoology—Anderson, E. C. Stoney; Cobb and Wright equal; Alexander and Atkinson, equal; Coppinger, Otway, Talbot-Crosbie; Beatty and Brook equal; Tomb, Peyton; Holmes and Vickery equal; Bate and Johns equal: Nicholson and Torrens equal; Crawford and Sherlock equal.

Half M.B.—Physics and Chemistry—Seymour, Coppinger, Marks, Sands, Cobbe, and Oldham passed on high marks; Sumerville, Tomb, and Woodroffe, equal; Haughton, Thompson, Connell, Conyngham; Beatty and Kenna, equal; Holmes and Jackson, equal; MacFarlane and Vickery, equal; Brook and M'Caul, equal; de Courcy, Gibbon, and Millar, equal; Drennan, Peyton, and Phelan, equal.

(a) "Selected Essays and Addresses." By Sir James Paget. Edited by Stephen Paget, F.R.C.S. London: Longmans, Green and Co. 1902.

Notices to Correspondents, Short Letters, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

ACCEPTED PAPERS, LECTURES, AND CASES.

The following are hereby acknowledged :—

"A Case of Internal Hydrocephalus in the Adult, simulating Cerebral Tumour." By W. B. Warrington, M.D., M.R.C.P. (Liverpool).

"A Case of Ascending Paralysis." By Alfred R. Parsons, M.D., F.R.C.P. (Dublin).

"The Normal Fundus as seen in the Ophthalmoscope." By E. Kenneth Campbell, M.B., F.R.C.S. (London).

"Notes on a Case of Osteoid Chondro-Sarcoma of the Liver, Treated by Disarticulation of the Hipjoint." By C. Yelverton Pearson, M.D., F.R.C.S. (Cork).

"Palatal Paralysis." By Docent Professor S. Erben (Vienna). From our Vienna Correspondent.

"Spinal Changes in Muscular Defects." By Professor H. Obersteiner. From our Vienna Correspondent.

DR. EDWARDS.—An article on the subject to which you refer is unavoidably crowded out, but will appear in our next.

SIR SHERLOCK HOLMES.

Among the men whom the King has delighted to honour, special mention should be made of Dr. Conan Doyle. Sir Conan Doyle is one of our most popular novelists, but readers of his works can never forget that he is at heart a doctor. His splendid service in South Africa and his able defence of the English army has shown moreover, that he is a true patriot. We gladly welcome Dr. Conan Doyle to the gallant gathering of medical knights.

OXONIENSIS.—The wiser course in sending a patient to a specialist under the circumstances you mention, is to ask whether he thinks it advisable or not for the patient to carry out treatment under his own private medical attendant; otherwise the specialist may take the patient under his care for a long period of time. In our own experience we have known of much heart-burning that could have been avoided by adopting the straightforward course above mentioned. A letter to a specialist must always draw an answer, and in professional relations of the kind involved the best of all guiding principles is that expressed in the old saw "prevention is better than cure."

L. B.—Yes.

THE HOSPITALS AND "THE CORONATION."

The hospitals on the route of the Royal Processions expected to gain much for their exchequers. The postponement of the Coronation has blighted all these hopes. It is said that St. George's and the Westminster were on the way to clear £10,000 after paying all expenses. At St. George's, 2,000 seats were let for a total of about £12,000. At Westminster Hospital 1,500 seats were let, realising about £12,000. At Charing Cross Hospital about 500 seats were let. It is to be hoped that purchasers will realise that the profits were to be devoted to a good purpose and will see that the hospitals do not suffer from the unfortunate event which was beyond the power of any to prevent.

Meetings of the Societies, &c.

LONDON.

WEDNESDAY, JULY 2ND.

OBSTETRICAL SOCIETY OF LONDON (20, Hanover Square, W.).—8 p.m. Specimens will be shown by Mr. Doran and others. Short Communication on a Case of Puerperal Eclampsia, with Autopsy and Remarks by Dr. R. H. Bell. Papers:—Mr. J. W. Taylor: (1) Complete Inversion of Uterus requiring Operation; (2) Ovarian Tumour obstructing Delivery, Vaginal Ovariotomy.

THURSDAY JULY 3RD.

NORTH-EAST LONDON CLINICAL SOCIETY (Tottenham Hospital).—4 p.m. Annual General Meeting. Election of Officers.

RONTGEN SOCIETY (20, Hanover Square, W.).—Annual General Meeting. 8.30 p.m. Election of Officers and Council.

FRIDAY, JULY 4th.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—Meeting 8.30 p.m. Card specimen by Major M. T. Yarr. Papers:—Mr. Charles Higgins, Mr. Ernest H. Cartwright and Mr. Sydney Stephenson.

THURSDAY, JULY 10TH.

BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover, Square, W.).—8 p.m. Short Papers will be read by Mr. Bowreman Jessett and Dr. Hodgson. Specimens will be shown by Mr. Jessett, Dr. Hodgson, Dr. Purcell, and others.

Appointments.

BELL, THOMAS, M.D.Glasg. Certifying Surgeon under the Factory Act for the Shepshed District of Leicestershire.

CROCKER, J. M., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory Act for the Bingley District of Yorks.

GARBUTT, R. H. O., L.R.C.P. & S.Ed., L.F.P.S.Glasg., Certifying Surgeon under the Factory Act for the Wolsingham District of County Durham.

HENEGHAN, P. J., L.R.C.S.I. and L.M., Certifying Surgeon under the Factory Act for the Foxford District of County Mayo.

HORNE, MAYNARD, M.A., M.B., B.C.Cantab., M.R.C.S., Assistant Anæsthetist to the Hospital for Women, Soho Square, London.

LEE, ROWLAND, M.B., B.Ch., B.A.O., R.U.I., Assistant Medical Officer at the Cardiff Workhouse.

LEWIS, S. T., Certifying Surgeon under the Factory Act for the Youlgreave District of Derbyshire.

MAXWELL, W. W., M.B., Ch.B.Edin., M.R.C.S., L.R.C.P.Lond., Senior House Physician to King's College Hospital.

MORGAN, W. E., M.R.C.S., L.R.C.P.Lond., Medical Officer of Health to the Union of Camberwell.

NOLANS, FRANCIS, F.R.C.S.I., Surgeon Medical Officer to the Irish Coastguards of North Wexford.

PRITCHARD, S. C., M.B., Ch.B.Edin., Junior House Physician to King's College Hospital.

REID, R. W., M.B., Ch.B.Aberd., Assistant House Accoucheur to King's College Hospital.

SHEARER, WILLIAM, M.B., Ch.M.Glasg., Medical Officer and Vaccinator for the Western District of the Parish of St. Andrew's.

STEELE, KENNETH, M.R.C.S., L.R.C.P., Anæsthetist to the Seaman's Hospital Society, with duties at the *Dreadnought* Hospital at Greenwich.

THOMSON, W. ERNEST, M.A., M.D., L.F.P.S.Glasg., Ophthalmic Physician to the Glasgow Maternity Hospital.

Vacancies.

County of London.—Medical Superintendent of the Epileptic Colony Asylum, Horton, Surrey. Salary £500, rising to £600 with house, rates, taxes, and water free. Applications to R. W. Partridge, Esq., London Asylums Committee Office, 6, Waterloo Place, S.W. (See advt.)

Hereford County and City Asylum.—Senior Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Junior Assistant Medical Officer. Salary £100 per annum, with board, lodging, and washing. Applications, with full particulars, to the Medical Superintendent.

Lanark County Council.—Assistant Medical Officer of Health. Salary £140 per annum, with travelling expenses. Applications to the County Medical Officer, Hamilton, N.B.

London County Asylum, Colney Hatch.—Junior Assistant Medical Officer. Salary £150 per annum, with board, apartments, and washing. Age not to exceed 30. For forms of application see advt.

Mercers Hospital, Dublin.—Resident Medical Officer. Immediate application to John Robinson, Registrar. (See advt.)

Parish of Birmingham.—District Medical Officer. Salary £350 per annum. Applications to Walter Bowen, Clerk, Parish Offices, Edmund Street.

Royal Albert Hospital, Devonport.—Resident Medical Officer. Salary £110 per annum, with board and lodgings. Applications to the Chairman of the Selection Committee at the Hospital.

Royal Dental Hospital of London.—The Curatorship to the Mechanical Department. Salary £200 per annum. Applications to Morton Smale, Dean, 32, Leicester Square, London, W.C.

Somerset and Bath Asylum, Cotford, Taunton.—Assistant Medical Officer. Salary £160 per annum, with furnished apartments, board, fuel, lighting, and washing. Applications to the Medical Superintendent.

Travelling Representatives.—Manufacturing Firm of Druggists require Travelling Representative for India, the Colonies, Continent and Home Districts. For full particulars as to Age, Salary, &c. (See advt.)

West Kent General Hospital, Maidstone.—House Surgeon. Salary £120, with board and residence. Applications to the Secretary.

Births.

BRISTOWE.—On June 24th, at The Cottage, Wrington, the wife of H. C. Bristowe, M.D., of a son.

CARR.—On June 27th, at 19, Cavendish Place, London, W., the wife of J. Walter Carr, M.D., of a daughter.

GLADSTONE.—On June 25th, at Clarendon Villa, Newton Ferrers, near Plymouth, the wife of Arthur Edward Gladstone, B.A. Cantab., M.R.C.S., L.R.C.P., of a son.

WYLLYS.—On June 29th, at 53, Fellows Road, Hampstead, the wife of Henry Wyllys, F.R.C.S.E., of Great Yarmouth, of a son.

Marriages.

BLAKE—MCCULLOCH.—On June 18th, at Edinburgh, Dr. T. F. Hillyer Blake, second son of T. W. Blake, M.D., of Bournemouth, to Isabel McDonald McCulloch second daughter of John and Mrs. McCulloch, of Edinburgh, N.B.

BLUE—RHODES.—On June 24th, at St. Peter's Church, Birstal, Charles Blue, B.A., M.B., of Boosbeck, Skelton-in-Cleveland, to Alice Mary, eldest daughter of the late Wilcock Rhodes, of Brier Hall, Gomersal.

Deaths.

EASTON.—On June 19th, at Alnwick, George Frederick Easton, M.D., of Cournace Hill, Dumfries, aged 83.

FFOLLIOTT.—On June 27th, at 13, Woodland Gardens, Muswell Hill, Deputy-Surgeon General Nicholas Ffolliott, A.M.D., aged 71.

GEE.—On June 27th, at 90, Carleton Road, N., Thomas Ernest Gee, F.R.C.P. Edin., of 67, Westbourne Park Road, London, aged 48, second son of the late William Gee, of Southwell.

SCOTT.—On June 26th, at his residence, Iver, Bucks, of heart failure, John Harrison Scott, M.B., F.R.C.S.I., younger son of the late William Scott, Rathmines, Dublin.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. JULY 9, 1902. No. 2.

Original Communications.

THE NORMAL FUNDUS AS SEEN WITH THE OPHTHALMOSCOPE.

By E. KENNETH CAMPBELL, M.B.ED., F.R.C.S.ENG.,

Surgeon to the Western Ophthalmic Hospital: Surgeon-Oculist to His Highness the Maharajah of Baroda.

DEFINITION (fundus = foundation).—The term fundus may be defined as the cup-shaped hollow of the sclerotic, pierced behind by the termination of the optic nerve, and lined by two superimposed layers, the choroid and retina.

Anatomical.—The sclerotic is to be regarded as an extension of the dura mater; the choroid, of the pia mater; and the retina, of the brain.

The sclerotic is a dense, unyielding, white, fibrous-tissue tunic continuous with the dura mater.

The choroid is composed of a richly vascular loose connective tissue web, the cells of which contain abundant pigment, *so as to insure the internal darkness of the eye and prevent internal reflection.* Behind, it is continuous with the pia mater, and in front is prolonged into the ciliary processes and iris, the whole expansion constituting the uveal tract.

The retina varies in thickness from ·4 m.m. at the posterior pole to ·2 m.m. at the anterior part, and morphologically consists of two distinct portions in close contact:—

(*a*) An outside pigmented part adherent to and partly concealing the choroid, representing the non-invaginated part of the "optic-vesicle"; it is composed of a single layer of hexagonal cells (·015 m.m.), loaded with the black "fucsin" crystals.

(*b*) An inside non-pigmented portion, representing the invaginated portion of the optic-vesicle; it consists of the following layers, counting from before backwards:—Internal limiting membrane, nerve-fibre layer (axis cylinders only), layer of ganglion cells, inner molecular layer, inner nuclear layer, outer molecular layer, outer nuclear layer, external limiting membrane, rods and cones.

The rods, which number about 130,000,000, and the cones numbering about 3,360,000, are to be regarded as the special nerve-terminations.

The retina has its own independent system of blood-vessels, *which lie principally beneath the nerve-fibre layer,* and are quite separate from those of the choroid. The arteries, like those of the brain, are "terminal," a fact which explains the blindness which ensues after thrombosis or embolism; also their proclivity to hæmorrhage.

The function of the pigment in the retina and choroid is to absorb the light that has passed through the layer of rods and cones, and so prevent any internal reflection from the white, glistening sclerotic.

The structural peculiarities of the "macular" region will be dealt with later.

OPHTHALMOSCOPIC APPEARANCES.

Be it noted that with the "indirect" metohd the different parts of the fundus are seen reversed and magnified about three times; while with the "direct" method they are seen in their natural position and magnified about fifteen times.

The pattern of the fundus of the two eyes generally corresponds.

The orange-red fundus-reflex or eye-ground, as seen with the ophthalmoscope, is essentially a red reflex from the choroidal blood, somewhat toned down by the pigment in the retina and choroid. Its particular tint may be said to harmonise with the complexion and the colour of the hair; being light or dark, in accordance with the amount of pigment in the skin, there being a distinct correlation between skin-pigment and eye-pigment.

Thus the particular tint of the fundus will vary from the light orange observed in the blonde with the fair skin and hair, to the deep chocolate or slate-colour of the dark-complexioned races. The essential portion of the healthy living retina, the non-pigmentary layer, is, apart from its blood-vessels, *transparent and invisible,* and any loss of this transparency implies disease. The capillaries of the retina are the smallest in the body, and cannot be seen by the ophthalmoscope either individually or collectively. The colouring matter in the pigmentary layer is as a rule sufficiently dense and opaque to conceal from view the subjacent choroidal vessels; it may, however, be scanty, and then they can be seen.

The pigment in the choroid is under ordinary circumstances distributed uniformly throughout the coat; it may happen though that, as seen with the ophthalmoscope, it resembles an irregular mosaic, being massed in definite areas enclosed within the meshes of a pink network formed by the anastomosing choroidal vessels. In subjects in whom the colouring matter generally is scanty, as those with very fair complexions, the pigment areas may be even lighter in tint than the vessels themselves.

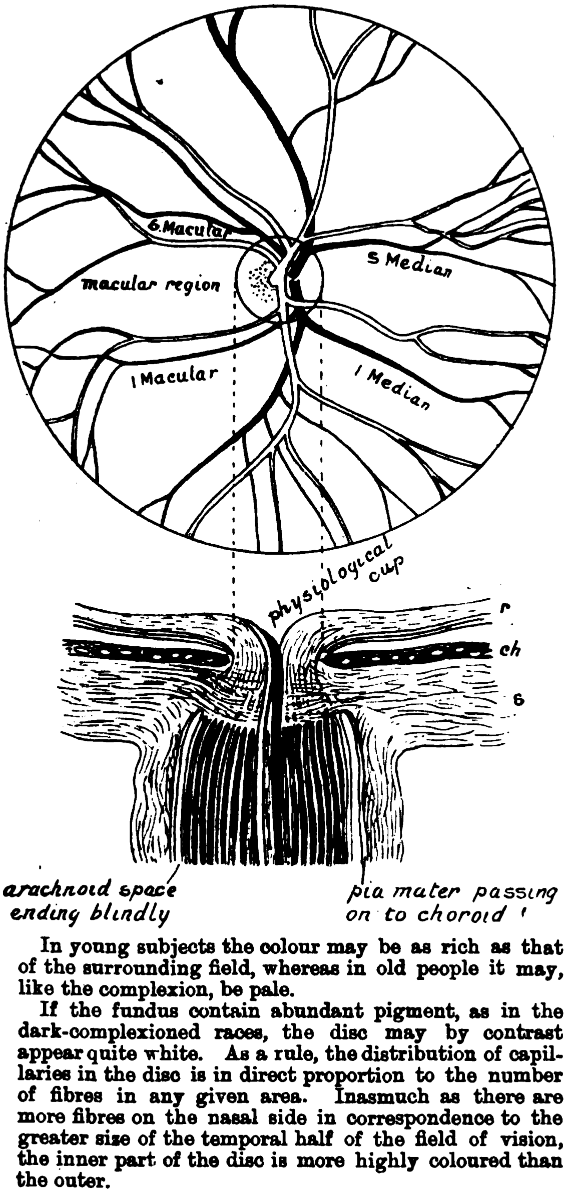
When we speak of the blood-vessels of the fundus we refer *to the columns of blood in them;* the vessel-walls themselves are invisible unless diseased, as is proved by the fact that by pressure on the globe with the finger a vessel may be rendered bloodless when no trace of its walls can be seen.

It is to be understood that the outline of individual capillaries cannot be observed with the ophthalmoscope. No vessel with a diameter of less than 1-700th of an inch is visible, while the average diameter of a capillary is only about 1-3000th of an inch. The upper or lower branch of the central artery of the retina which appears comparatively large as seen with the ophthalmoscope, is in reality only about 1-100th of an inch in diameter. These facts can easily be realised when it is remembered that by the "indirect" method the magnification is about three times the actual, while by the "direct" method it is about fifteen times.

The most conspicuous land-mark in the cup-shaped hollow of the fundus is the intra-ocular termination of the optic nerve, commonly known as the "optic disc" or "nerve head." Paler than the surrounding choroid, it in many cases somewhat roughly suggests a full moon; it is easily recognised by its rounded outline and whitish core, and by the branching vessels which spring from it. The term "papilla" formerly applied is a misnomer, as under normal conditions it does not project beyond the level of the plane of that zone of the retina immediately around it. *Its tint is always redder in the young than the old,* and it is an ophthalmic maxim that its shade of colour may be as varied as that of the cheek.

The usual shape of the disc is circular or oval, and although much magnified by the ophthalmoscope, its actual diameter is about 1·5 m.m., and its position some 15° to the nasal side of the posterior pole, so that in order to bring it into view the cornea must be turned a little inwards towards the nose.

The border of the disc is sharply defined, except in "optic neuritis," and certain cases of astigmatism; and in colour it exhibits an outer pink zone, due to the presence of numerous capillaries, surrounding a whitish central core.



In young subjects the colour may be as rich as that of the surrounding field, whereas in old people it may, like the complexion, be pale.

If the fundus contain abundant pigment, as in the dark-complexioned races, the disc may by contrast appear quite white. As a rule, the distribution of capillaries in the disc is in direct proportion to the number of fibres in any given area. Inasmuch as there are more fibres on the nasal side in correspondence to the greater size of the temporal half of the field of vision, the inner part of the disc is more highly coloured than the outer.

Scleral Ring.—Sometimes, and more especially in old people, the disc is seen to be encircled by a pale ring, complete or incomplete, and usually not of uniform thickness, being wider as a rule below. It is generally known as the "scleral ring," but this term is a misnomer as it is in reality due to a band of connective tissue which surrounds the head of the optic nerve in the same way as a piece of cotton or string encircles the stalks of a bunch of flowers.

Choroidal Ring.—External to the scleral ring, either in conjunction with it or not, may sometimes be noticed another ring, the "choroidal ring," black in colour, and caused by the heaping up of pigment along the annular margin of the choroidal aperture. It may form either a complete circle, but is usually defective in places; the pigment is usually massed mostly along the outer side, and then may take the shape of a black crescent, liable to be mistaken by the inexperienced for a pathological change. Both these rings are often absent.

In consequence of the floor of the cup being sunk below the level of the surrounding fundus the observer, on moving his head from side to side, will notice a parallactic displacement of the parts.

The manner of formation of the physiological cup is as follows:—The lamina cribrosa, or spot at which the optic nerve fibres pierce the globe, consists only of the inner third of the thickness of sclerotic, the outer two-thirds peeling off and blending with the outer sheath of the nerve. Just before entering the lamina cribrosa the 500,000 medullary sheaths of axis cylinders of the optic nerve abruptly cease, just as the sleeve ends at the wrist, and in bundles of varying sizes pass through the sieve like holes in the lamina cribrosa.

In the pale central part of disc the floor is generally sunken below the surrounding level, giving rise to a funnel-shaped depression, the "physiological cup." The size, shape, and depth of this cup all vary within somewhat wide limits; sometimes it is so small as to be barely recognised, while in extreme cases it may be so large that by the inexperienced its boundary may be mistaken for the actual border of disc. It never occupies, however, the whole of the area of the nerve-head, for by careful inspection it can always be seen to be surrounded by a distinct pink belt of disc margin. (*a*)

After having emerged through these holes, and prior to reaching the plane of the retina, the fibres open out from one another like the petals of a flower, forming in this way a funnel-shaped hollow, the physiological cup.

Although of diverse size, shape and depth in different individuals, as a rule the cup on the temporal side is shallow and shelves gradually down, whereas on the nasal side it is steep, sinking down abruptly.

In many cases, owing to the way the nerve-fibres separate out, the lamina cribrosa is exposed to view: under these circumstances the cavity of the physiological cup appears not of one uniform colour but "mottled," dark-grey spots lying imbedded in a steel-coloured ground. The dark-grey spots are due to the bundles of naked axis cylinders being seen as they pierce the lamina cribrosa, and as they reflect less light than the fibrous tissue of the lamina cribrosa itself, present a darker colour.

The area of the lamina cribrosa, consisting as it does of but the inner third of thickness of sclerotic, is the weakest part of the eye-capsule, and accordingly, in conditions of increased tension is the first part to yield (glaucomatous cup) moreover, the holes in the lamina cribrosa being rigid, the axis cylinder of the optic nerve are very liable to become strangulated in optic neuritis, and to pass on to atrophy.

MYOPIC CRESCENT.

During the elongation of the posterior segment of the globe which takes place in myopia, the annular margin of the choroidal aperture on the side facing the macula undergoes atrophy, exposing a corresponding area of the white sclerotic. Under these circumstances a white crescent, with its convex margin either sharply cut or ill-defined, often edged with black, is seen on the immediate outer side of disc; this is known as the "myopic crescent." In rare cases a somewhat similar appearance may be observed in emmetropia and hypermetropia.

(*a*) In glaucoma the cupping involves the entire optic disc, and the edges are undermined, which they never are in physiological cupping.

In the higher grades of myopia the choroidal atrophy may be so extensive that the entire nerve-head is encircled by a zone of exposed sclerotic, and sometimes the white patch may extend irregularly for a considerable distance. When it forms a ring care must be taken not to mistake it for the boundary of the disc.

Peculiarities in Development.

The congenital crescent is a whitish crescent with convexity downwards. This is a somewhat uncommon condition; its distinguishing feature is that it occupies a situation immediately *beneath* the disc either directly or a little sideways and beneath. It is generally thought to be due either to exposure of the sclerotic, the result of the fœtal cleft failing to close completely up to margin of disc, or else to the fact of the connective tissue of the lamina cribrosa being especially thick and dense at the lower part of disc.

Coloboma of choroid results from the non-closure of fœtal cleft causing the exposure of corresponding area of the sclerotic. It occupies a situation in the lower part of the fundus, being usually wedge-shaped, with base below and apex at some distance from the disc, and sides pigmented. The retinal vessels usually course over the patch, but the rest of the tissue of the retina is either incompletely developed or entirely absent. The floor of the gap is usually sunk, as the sclerotic over the area is generally thin, and in rare cases may yield to the intraocular tension to such an extent that an actual cyst forms which may exceed the eye in size. It is usually associated with coloboma of the iris.

Coloboma of Disc.—This may exist by itself or in conjunction with coloboma of the choroid. It is due to imperfect closure of the fœtal cleft at the lower part of the disc. The disc below appears enlarged, with a depressed floor, the vessels dipping down into it.

Vessels.—With the exception of those in the disc, the retinal arteries, like those in the brain, are "terminal." Although their general distribution is more or less the same in nearly all cases, their exact course is subject to variation. As a rule the arrangement in the two eyes corresponds.

Usually, the central artery issues from the disc as a single trunk and somewhat ex-centrally, then divides into a superior and inferior branch which runs respectively upwards and downwards in a more or less vertical direction, the upper giving off a superior temporal and superior nasal, and the lower inferior temporal and inferior nasal. While the main branches are yet on the disc, each gives off a superior and inferior macular and superior and inferior median. The macular arteries skirt the yellow spot, taking a sweep over and beneath it. No visible vessel can be traced into the macula.

Cilio-retinal Vessels.—Occasionally independent cilio-retinal vessels, derived from the posterior ciliary, emerge from the temporal side of disc and pass outwards towards the macula; the existence of these vessels explains the fact that occasionally in embolism of the central artery the portion of the retina supplied by them retains its vitality. Subsequently, the vessels subdivide by a successive series of bifurcations, the general arrangement of the veins corresponds to that of the arteries. Both sets of vessels lie just beneath the nerve-fibre layer, a fact that explains the flame-shaped character of the typical retinal hæmorrhage. All the larger vessels are surrounded by perivascular lymphatics, which, like the vessel walls, are invisible. No capillaries have been traced by the aid of the microscope to the rod and cone layer. The fovea centralis has likewise been proved to be non-vascular.

In the small eye of hypermetropia the vessels may appear tortuous and sinuous, as though they were developed for the larger emmetropic eye. For a similar reason they often run a comparatively straight course in the bigger eye of myopia.

Occasionally there may be a persistent hyaloid-artery, consisting of a single solid thread short or long, attached to the central artery.

As a rule, the main vein lies completely buried in the disc, the two constituent branches piercing it separately.

There is no constancy in the arrangement of the companion veins; two veins may run with one artery or one vein with two arteries.

If a single vein accompany a single artery the latter is generally about two-thirds the size of the former, the reason being that the artery is more distended with blood and so presents a cylindrical, while the less distended and more flaccid vein presents a flat tube. Broadly speaking, the diameters of the retinal veins are in inverse ratio to their number. Comparison of retinal arteries with retinal veins:—Arteries: Lighter in colour, smaller in size, straighter in course, cylindrical in shape, branches do not anastomose. If viewed on a plane perpendicular to observer's visual axis, show a well-marked median light stripe. Veins: Darker in colour, usually larger, less straight in course, flattened in shape, median light stripe much less defined. Pulsation in the retinal vessels.

Venous pulsation is physiological in over 70 per cent. of eyes. It occurs as a "throbbing" to be noticed more particularly in the main trunks as they lie on the disc.

Arterial pulsation can be produced artificially by pressure on the globe by the finger, and in rare instances may be physiological. It is occasionally found in the severer forms of anæmia, and is always present in glaucoma when intraocular tension is raised. It is of frequent occurrence in aortic regurgitation, being more marked the greater the hypertrophy of the left ventricle. By careful focussing, the tube can be seen to broaden and lengthen out, the former peculiarity being especially noticeable if attention be directed to a point on the vessel just before its bifurcation, and the latter if attention be directed to any spot on the artery at which there is marked curving. The pulse-wave can generally be traced a considerable distance along the course of the vessel, like the "locomotor pulse" as seen on a surface artery, and so characteristic of "aortic regurgitation"; in this respect it differs from the pulse seen in glaucoma, which is generally confined to the disc and its immediate neighbourhood.

"Macular" or "Yellow-spot" region is the area of maximum retinal light-sensitiveness, and closely corresponds in situation with the posterior extremity of the optic axis, being located about two disc-diameters from the outer side of the nerve-head (3 to 4 m.m. external, and 1 m m. below, centre of optic-disc). The term "yellow-spot" refers to a post-mortem change, and never presents this colour in an ophthalmoscopic examination during life. Circular or elliptical in contour, its average diameter is about 2 m.m., and its area has been estimated at about 2¼ square m.m. (2·356). It is brought into view when the patient is directed to look straight forward, and its ophthalmoscopic appearance varies within wide limits both in different persons, and under variations of illumination in the same person.

The colour is usually deeper than that of the surrounding parts, but it has no well-defined boundary, and to the beginner is the least conspicuous part of the fundus, by him being more often recognised by its negative than by its positive characters.

The retinal vessels sweep round, and no visible one can be seen to enter it.

Histology.—The boundary of the macula is slightly raised on account of the existence here of seven or eight additional ganglion-cell layers. From the raised rim the layers gradually fine down to the centre, a spot generally known as the "fovea centralis," which is the thinnest part of the retina, consisting of but two layers, the "cones" and "outer-nuclear." In the middle of the fovea centralis there may be a minute dimple. The macula as a whole, owing to its raised rim and depressed floor, may be likened to a very tiny crater.

The crater-like depression of the macula cannot be seen with the ophthalmoscope, but owing to the extreme thinning of the retina here, and consequent exposure of the subjacent pigment, it sometimes exhibits a red-brown spot, an appearance more usually to be observed in subjects with dark complexions, due to the subjacent pigment being especially exposed.

"Crick," or Gunn's Dots.—This is the term applied to a rare physiological condition in which minute pale

or yellow coloured dots are to be seen in the macula region, and sometimes suggesting very tiny seeds. They may be very conspicuous, especially if the illumination be feeble, while, on the other hand, the light may require to fall upon them in a particular direction in order to render them visible.

Reflexes.—Certain phenomena, known as "reflexes," may sometimes be observed in the yellow-spot region, and in relation to the larger retinal vessels. As a rule they are only to be met with in children.

They generally have a peculiar satiny shimmer, and may be of three kinds: *(a)* Macular reflex; *(b)* foveal reflex; *(c)* vascular reflex.

(a) The macular reflex, when present, is generally to be seen in the form of a "dancing halo" or luminous ring around the fovea, and shifting its position on moving the mirror. It is an inverted image of the ophthalmoscopic mirror reflected from the raised and convex line of the macula.

(*b*) The foveal reflex when found usually takes the form of either a bright (*a*) crescent or (*b*) sparkle. If the former (*a*), it may be noticed to move about in such a way that its concave side presents itself towards that part of the retina to which the eye of the observer is directed. If the observer can concentrate his gaze towards the very bottom of the pit the crescent may sometimes be noticed to change into a tiny ring with a central sparkle. The crescent is in reality an image of an arc of the "sight-hole" of the ophthalmoscope, the bottom of the foveal pit behaving as a concave mirror, while the "ring" is an image of the circular rim of the reflector, in the former case the annular opening being excentric to the pit and in the latter centric to it. (*b*) The sparkle, also a reflection from the concave macula, suggests the appearance of light radiating from a bull's-eye lantern, and is generally known as the policeman's lantern reflex.

(*c*) Vascular reflexes are to be noticed as a rule only in children, rarely in adults. They take the form of dancing reflexes in relation to the larger branches of the retinal vessels, in which connection they appear as bright, lustrous, shifting lines or bands with a characteristic satiny shimmer; sometimes they assume the shape of forked lightning. They are no doubt images of those parts of the ophthalmoscopic mirror from which they receive the light.

With advancing life all these reflexes disappear or else become very faint. An important point in connection with them is that they all shift with movements of the mirror.

The pathological changes which may occur in the macular region are those more especially in connection with chronic Bright's disease, central choroiditis, and senile conditions.

As previously stated, the characteristic orange-red fundus reflex is a composite effect, the result of the mingling of the red of the blood in the choroid with the eye pigments, the colour being darkest in the neighbourhood of the posterior pole and becoming lighter towards the periphery in accordance with the distribution of the pigment, which is most abundant in the region of the macula thinning out towards the ora serrata. Under ordinary circumstances the vessels in the choroid are not visible except at the periphery.

Sometimes, however, and within physiological limits, the individual vessels of this tunic may be observed with the ophthalmoscope, especially under the two following conditions:—

(a) In a very light-complexioned subject, the choroidal and retinal pigments not being abundant, the choroidal vessels may be noticed in the form of an anastomosing pale red network; while *(b)* in a very dark-complexioned subject in whom the eye pigments are abundant, the fundus may have a tessellated appearance, being mapped out into an irregular mosaic of dull-coloured patches embedded in the network of red anastomosing choroidal vessels.

We must assume in both these cases first a relative absence of the retinal pigment which when fully developed, conceals the outlines of the choroidal vessels, and secondly, a special concentration of the choroidal pigment in the intervascular spaces, and a comparative absence of it over the vessels themselves.

The vessels of the choroid can never be mistaken for those of the retina if the following facts are borne in mind: they freely anastomose, forming a net; they have no light stripe; in outline they are not so clearly marked and are more pink in colour.

With careful focussing by the direct method, especially in the neighbourhood of the macula, a fine granular "stippling," or appearance suggestive of very minute grains of sand may occasionally be observed.

This arises from the hexagonal cells containing the black fucsin crystals of the pigmental layer of the retina being brought into view. Each cell measures about ·015 m.m. in diameter, which when multiplied by 15 (the magnification of the direct method) gives an apparent size of ·225 m.m.

By the inexperienced observer these granules may be mistaken for a pathological state.

As before stated the tissues of the non-pigmentary portion of the normal retina being, apart from its arteries and veins, transparent, it is during life invisible by means of the ophthalmoscope, and with the notable exception of "opaque nerve fibres," any opacity present therein indicates a pathological change.

Occasionally, however, and as a rule only when the choroidal pigment is abundant, the actual retina can be seen in the form of a fine, softly-tinted, pearly-grey film, or very delicate gauze, and although a very exceptional condition among Europeans, in the black-complexioned races the delicate axis-cylinders of the nerve-fibre layer can usually be seen radiating into the general retinal expansion.

Opaque Nerve-fibres.—Though the normal, living, non-pigmentary portion of the retina is transparent, the condition known as "opaque nerve-fibres" may, as a rare congenital peculiarity, be found in one or both eyes. As before explained, the medullary sheaths abruptly cease just beneath the lamina cribrosa, leaving the axis-cylinders naked, but in this case they resume them for some distance into the retina, giving rise to snow-white, striated, feathery-edged patches which conceal the fundus-pigment and in places bury the vessels.

Although generally joined to the disc, they may occur in the form of separate "islands." They must not be mistaken for spots of choroidal atrophy, which are as a rule clean-cut with an enveloping ring of dark pigment, and have the retinal vessels coursing over them; nor for the white patches of albuminuric retinitis, being clearly distinguished from such by their flame-shaped, feathery, fringed, fibrillar, or hair-like edge. In rare cases the medullary sheaths extend on to the disc, concealing a portion of it. The retina is blind over these areas. In the rabbit the condition is a normal one.

NOTES ON A CASE OF

OSTEOID CHONDRO-SARCOMA OF THE FEMUR,

TREATED BY DISARTICULATION AT THE HIP-JOINT; WITH EXHIBITION OF SPECIMEN, PHOTOGRAPHS, AND MICROSCOPIC SPECIMENS. (*a*)

By C. YELVERTON PEARSON, M.D., F.R.C.S.,
Professor of Surgery, Queen's College, Cork.

C. C., æt. 58, farmer, fell from a ladder on his heels nearly eight years ago; heard something give way at the knee, and was unable to stand for three weeks. After this he got about his business as usual. Two years after, he got another fall from a ditch. This was followed by pain above the right knee; and a tumour, at first about the size of a marble, was noticed during the following twelve months. Four years ago, *i.e.*, two years after the second fall, he had to get his trousers enlarged in

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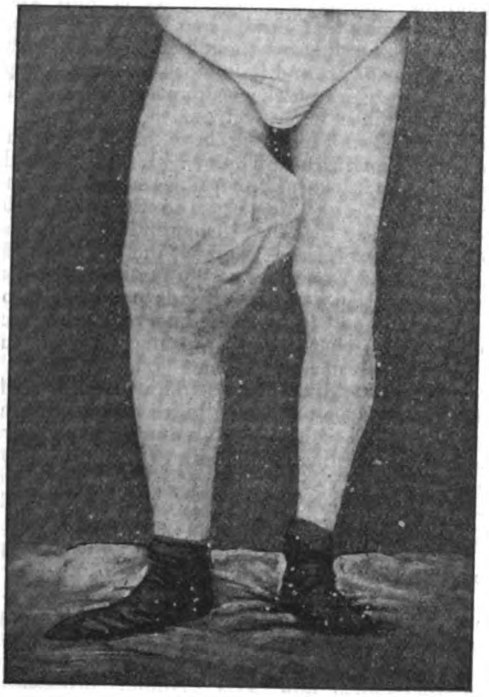
(*a*) Read before the Pathological Section of the Royal Academy of Medicine in Ireland, May 2nd, 1902.

consequence of the swelling. Two years after this he was admitted to the North Infirmary under the late Dr. O'Sullivan, when amputation was advised. This he declined at the time for family reasons, and returned home. He was re-admitted August 16th, 1901, and prepared to submit to amputation, the tumour having steadily increased and the limb having become very painful.

Present Condition.—Has a large irregular swelling, occupying the lower two-thirds of the right thigh, some portions of which feel very dense. Circumference of tumour at widest part = 13 ins.; of limb above = 21 ins.; of limb below = 17 ins. There is marked mapping of the veins, which are much enlarged, on the inner and anterior aspect. A rose-coloured rash of a lichenous character, consisting of groups of papules with intervening hyperæmic skin, is present on the lower portion of the swelling at the inner side of the knee-joint. The leg below is considerably swollen and œdematous. The appearances are well illustrated in the accompanying photograph. The glands in the groin are considerably enlarged and of stony hardness. The patient's health was good and no evidence of other disease was present. Amputation at the hip-joint was performed on August 22nd.



Operation.—A vertical incision, 4 ins. in length, commencing a little below Poupart's ligament, was made over the femoral vessels. The common femoral artery and vein were ligatured, then the superficial and profunda arteries and veins. The vessels were then divided between the ligatures. The enlarged lymphatic glands were now dissected out from the groin. The amputation was completed by a rachet-shaped incision. The various vessels were secured with compression forceps as divided, no tourniquet or digital compression being employed. The progress of the case was most satisfactory for the first three or four days, but subsequently the dressings became contaminated with urinary and fæcal discharge, and suppurative inflammation took place, in consequence of which the patient made a slow, though very satisfactory recovery.

Pathological Report, by Dr. A. E. Moore.—The tumour consists chiefly of cartilage, but contains sarcomatous elements and some extensive ossific centres. Microscopic examination shows that some parts are composed exclusively of large cells; in other parts the process of ossification in cartilage is well displayed; while some sections leave no doubt of the sarcomatous nature of the growth. Judging both from the appearance and the history there is no doubt that the tumour originated as a periosteal chondroma, and subsequently developed malignant characters. Examination of the glands removed from the vicinity of the common femoral vessels showed that they contained calcareous deposit and large cartilage cells, the nuclei of which exhibited the phenomena of karyokinesis, and leave no doubt as to the glands being the seat of secondary deposit.

Remarks.—The chief points of interest in this case to my mind are:—

1. The traumatic origin, which seems so frequent in the case of sarcomatous growths, and especially of those affecting bone.
2. The infection through the lymphatic system.
3. The long periods which elapsed from the origin of the tumour before it took on a malignant character.
4. The subsequent history of the case, which shows that the infection had travelled beyond the region of operative interference, as a few weeks ago the patient was re-admitted to the infirmary suffering from severe pain in the abdomen, which on examination was found to be due to the presence of a large tumour in the epigastrium, which had a well-marked impulse transmitted from the aorta, and is, I have no doubt, the result of secondary implication of some of the lumbar lymphatic glands.
5. The method of amputation adopted which provided for ligature of the main vessels and extirpation of the glands previous to disarticulation, and which dispensed with the use of tourniquet or other special methods of controlling hæmorrhage in what is justly regarded as the most formidable of amputations.

FALLACIES IN THE COPPER REDUCTION TEST

FOR

SUGAR IN THE URINE (*a*).

By FRANCIS D. BOYD, C.M.G, M.D., L.R.C.P.

Physician to the Deaconess Hospital, Assistant Physician to the Edinburgh Royal Infirmary.

IT not infrequently happens that cases come before medical men who have much to do with insurance work in which the occurrence of reducing substances in the urine, other than glucose, gives rise to considerable difficulty. One is quite familiar with the case of the stout, elderly patient, of a nervous temperament, who braces himself up to face the ordeal of medical examination by taking a glass or two of champagne, and then presents symptoms of transitory or alimentary glycosuria. Apart from such persons, however, it is common to meet with urines free from sugar which, nevertheless, partially reduce Fehling's solution, and the circumstances under which such a reduction takes place demand the attention of the practical physician. The observations were made in the following manner: 2 cc. of Fehling were taken and tested with solutions of reducing agents of known strength, the time at which reduction began and that at which it was completed, and the quantities of the reagents required being noted in each case. The amount of diabetic urine needed completely to

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(*a*) Paper read before the Edinburgh Medico-Chirurgical Society July 2nd, 1902.

reduce this quantity of Fehling ought not to exceed 1·5 cc. A subsequent microscopic examination of the deposit was made in each case. The following are the principal fallacies met with in testing for sugar :—

1. Glycuronic compounds. These occur in the urine of some healthy persons, as well as after taking such drugs as camphor, terebene, &c., belonging to the aromatic series, in infectious diseases, and in sepsis, typhoid, tonsillitis, &c. These bodies are generally regarded as protective in their nature and are the results of the conversion of toxic aromatic substances into innocuous compounds. If present in abundance they reduce Fehling, and may be detected by the phenyl-hydrazin bromide method, which yields a microscopically recognisable deposit of crystals, by the fact that they reduce copper and bismuth in alkaline media, by a negative result on applying the fermentation test, and by the addition of hydrochloric acid and orcin or phloroglucin, with which they give a red colour, turning a reddish blue, and then throwing down a blue precipitate giving a green solution in alcohol. Finally, they may be detected spectroscopically by their characteristic absorption bands.

2. Creatinin is given by the text-books as a possible fallacy in carrying out the test with Fehling. On boiling a urine containing creatinin with that reagent a green discolouration takes place. Creatinin is derived from the food substances, and completely to reduce 2 cc. of Fehling ·07 gramme is required. This is much more than is ever present in 1·5 cc. of urine, so that practically this fallacy may be excluded. The test for creatinin is the usual nitro-prusside reaction.

3. Uric acid is another text-book fallacy. Here again a very larger quantity (·03 gramme) is required to reduce 2 cc. of Fehling completely than is ever present in the urine. Unless there is a very great excess of uric acid present, this, therefore, is a fallacy which need not trouble us at all.

4. Alkaptonuria is a not very uncommon condition in intestinal putrefaction, constipation, &c. Here exposure to the air turns the urine darker, and the addition of an alkali turns it darker still. The Fehling's solution gives a dark brown solution turning black, and yielding a black precipitate, which further reduces copper on boiling. The presence of pyrocatechin or hydroquinone in the urine gives a similar reaction. Here the change of colour which the urine undergoes is characteristic, and should prevent alkaptonuria being mistaken for glycosuria.

5. As regards the identification of the different osazones — phenyl-glucosazone, phenyl-lactosazone, phenyl-pentosazone, &c.—chemists recommend the estimation of their melting point as the only trustworthy method, but this is not clinically available. It will be found that the crystals of these bodies have a different microscopical appearance, and with a little practice they can be distinguished from one another. The matter may be summarised as follows :—(1) Creatinin and uric acid can be practically neglected as a source of error. (2) In alkaptonuria the darkening of the colour of the urine is characteristic. (3) No error is likely to arise in carrying out the Fehling test if the observations are made *below the boiling point.* The Fehling should be boiled in one test tube, the urine in another, and the two allowed to cool slightly before mixing. By this method only sugar will reduce Fehling. In cases where further evidence is required the phenyl-hydrazin test for sugar, the phenyl-hydrazin bromide test for the glycuronic compounds, and the fermentation test, are conclusive.

It has been decided to invite the members of the British Medical Association to hold their annual meeting in 1903 at Swansea.

PERIPHERAL THEORY OF NERVE REGENERATION WITH SPECIAL REFERENCE TO PERIPHERAL NEURITIS (*a*).

By ROBERT A. FLEMING, M.A., M.D., F.R.C.P. Ed.,
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There are two theories of nerve regeneration, the central and the peripheral. According to the *central theory*, regeneration of a divided nerve takes place solely by the penetration of the axis cylinders, or of outgrowths resulting from the sub-division of the axis cylinders, from the proximal end of the nerve into the distal part. The facts which weigh against this theory are the results of secondary suture, that is, suture of nerves which have been divided for months or longer. As is well known, such suture may be followed by a return of sensation in the area supplied by the affected nerve within a few hours or days, and it is most difficult to explain this rapid recovery on the assumption that regeneration takes place entirely from the centre to the periphery. Two hypotheses have, however, been put forward to explain the difficulty :—1. That not all the axis cylinders in the peripheral segment of the nerve degenerate, although they cease to stain. From this it follows naturally that the sensory end organs must be supposed to exercise a trophic function, and Marie has carried the reasoning a step farther, and asserts that degeneration actually extends upwards into the proximal portion of the divided nerve. 2. The second explanation is that there is an anastomosis among the peripheral nerves, whence axis cylinders are developed in the divided one, and are ready to take on function as soon as union takes place. From the central theory it results that an amputation neuroma must be regarded as a splitting or multiplication of pre-existing axis cylinder processes, and that in grafting the graft is penetrated from its proximal end only. The *peripheral theory* may be formally stated in the shape of five propositions :—1. The peripheral part of the divided nerve degenerates in its entirety. 2. The phagocytes removing the myelin sheathes are first the leucocytes, then the connective tissue corpuscles, and then the neurilemma cells. 3. The neurilemma cells then regenerate new axis cylinder processes by assuming a neuroblastic action. 4. This regeneration is only, however, complete if the ends of the divided nerve are ultimately united. 5. The amputation neuroma is due to a regeneration of fibres in the proximal end, similar to what takes place in the distal portion, and a graft is penetrated by axis cylinders from both ends, not one only. For the study of these changes Stroebe's stain is invaluable, and affords convincing evidence of the truth of the peripheral theory. Nevertheless, the central theory cannot be entirely discarded. If we are to regard the amputation neuroma as of neuroblastic origin we seem almost to endow the neurilemma cells with the property of malignancy, although it is true that in their proliferation they do not infiltrate the skin and surrounding tissues.

In peripheral neuritis a similar peripheral regeneration of nerve fibres takes place, as is shown by four cases examined post-mortem. All were typical cases of alcoholic neuritis, and showed the usual paræsthesiæ, paralysis, loss of knee jerks, muscular tenderness, &c. In peripheral neuritis the toxin affects the whole lower neuron, whose trophic centre is a nerve cell, either in the anterior horn of the grey matter or (in the case of centripetal fibres) in the ganglion of

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(*a*) Paper read before the Edinburgh Medico-Chirurgical Society, July 2nd, 1902.

the posterior root. We have therefore to consider the changes first in the cells, and secondly in the axis cylinder processes. Affected nerve cells show chromatolysis, the nuclei become eccentric in position, and are finally almost extruded from the cell, while the Nissl's bodies cease to take on the stain. In the peripheral nerves there are first vascular changes, consisting in thickening of the inner and middle coats of the arteries so that the lumen becomes almost impervious; secondly, an enormous amount of exudation which probably gives rise to the clinical sign of hyperæsthesia; third, the axis cylinders degenerate more or less, the finer fibres suffering to the greatest extent. In the first and second of the cases examined, but not in the third, regeneration had taken place by means of neurilemma cells in the peripheral nerves, while in the fourth case there were signs of regeneration in the phrenic nerves only, yet the patient died with paralysis of the diaphragm. In connection with Dr. Fleming's paper a large collection of microscopic preparations, drawings, and lantern slides were shown in illustration of the various points referred to.

THE DIFFERENTIAL DIAGNOSIS OF PLEURITIC EFFUSIONS.

By Dr. ALEX. VON KORANYI,
Professor at the Faculty of Medicine of Budapest.

It is well known to clinicians that many cases of pleuritic effusion are difficult, if not impossible, to delimit by percussion owing to one or more of the solid organs, such as the liver, lying in the immediate neighbourhood of the effused liquid. These cases, rare though they be, are sufficient to prove the existence of certain defects in our means of clinical investigation. The importance of Traube's space in the diagnosis of left-sided effusion is also a factor in the diagnosis of all such cases, one, too, that should not be overlooked in the delimitation of the chest. This is a space which is often filled by increase in size of the liver, the heart, or the spleen, and these conditions require to be differentiated from pleuritic effusion. The space is in the lower part of the thorax lying between the liver and spleen. This, the so-called Traube space, is often the most difficult to percuss owing to the frequency of its being filled with fluid, while above it may be found the consolidated lung, fluids always gravitating to the lowest level. In this case the crescentic outline of the lung will still be observed whether the dulness be present or not. The same difficulty prevails posteriorly in defining the limits of the lung and spinal column. It is with this object in view, and to elucidate the utility of transsonant percussion, that the author has approached the subject.

If the stethoscope be placed over a solid organ of the body at a point where it approaches the parietes, and the part percussed at the same time, a peculiar sound of a shrill ringing character will be heard. This sound continues as long as the percussion is within the parietal contact-limits of the auscultated organ, but ceases immediately the limit is passed. By this means the surface contact of a parietal organ can be accurately delineated on the surface of the body. The author has marked out the boundaries in many obscure cases by this topographical percussion, which could not have otherwise been accomplished. The author uses a simple binaural stethoscope with two indiarubber tubes fitted with olive-shaped vulcanite ends for the ears. The point of the left index finger is pressed well down into the surface of the body and then struck with the firmly extended finger of the right hand. This form of percussion is a slight modification of Reichmann's, who employed a rod to press into the surface, which he struck with the finger in percussing. Either method may be employed in this form of auscultation, and the results obtained will be in proportion to the operator's experience of the particular method, as the principle is the same, though reduced to its simplest form in the striking of the finger.

The method adopted by the author is to press the point of the left index finger well into the thorax, and then strike it with a finger of the right hand; either method gives a similar tone by the stethoscope. Long and careful observation is absolutely necessary to prevent mistakes. One point might be noted for the benefit of those who have not practised this form of auscultation, viz., that the distance between the finger and the stethoscope must not be too great, or the sound may be so altered as to lead to error; it is therefore necessary that the finger should slowly and methodically follow the stethoscope in percussing the organ. Again, the ribs are good conductors of sound, and may lead to error if the finger be not well pressed down between them, more particularly in the neighbourhood of the sternum. In the event of one's not being able to get between the ribs, an assistant may be directed to place his hands on the chest on either side of the point which is under examination; for instance, one on the sternum and the other on the lateral wall of the thorax. By this device the author has been able to percuss the most complicated cases with excellent results.

This form of auscultatory percussion enables one to analyse the dulness of a number of organs lying in very close proximity to each other, which can be done with perfect accuracy and ease, when the heart, liver, and stomach are clearly defined.

This method of diagnosis is particularly valuable in left-sided pleuritic effusion. If the stethoscope be placed on the outside of the cardiac area it will be found to have extended far into the effusion if followed to its outer border. In percussing the exudation itself it must be borne in mind that the upper part of the dulness does not accurately define the limit of the effusion, as more accuracy will be required to define the line of demarcation between the compressed lung and the fluid. If the thorax be percussed behind, it will be difficult to limit the effusion externally, as the lung will gradually sink; but if percussed towards the spinal column it will be found to go across the medial line, towards the right or healthy side.

The lower margin of the fluid is another important feature in the diagnosis, which practically should extend from the twelfth rib posteriorly along the margin of the thorax to the front, but in practice it will be found to be far below the marginal vault of the thorax, as the exudation by its own weight tends to push the diaphragm down, and thus distend the pleural sac in that direction. On the other hand, the empty lung will be found, not in the complementary space made by this depression of fluid, but highly placed in the posterior part of the thorax about on a level with the ninth rib in the scapular region. It will be seen that the defining of an effusion is a long and tedious process, and entails what in many cases is unnecessary labour; but questions do sometimes arise that tax our ingenuity to the utmost to delimitate effusions from some other morbid change that may lead us astray in operating—for instance, if it be doubtful whether the case is pleural effusion or pneumonia, or whether there is effusion with pneumonia. This can easily be differentiated by placing the stethoscope within the scapular line and slowly percussing outwardly. If a pleural effusion exist the dulness will follow the costal curve, but if it be pneumonia without effusion the alteration in sound will be two inches higher than the curve. By the same process of examination both sides may be high and reveal double pneumonia, while an effusion in both sides would be two inches lower than the normal.

The author urges that no one should be without this knowledge in the diagnosis of disease, which can only be made practical by long experience and careful observation. Its value is not confined to the delimitation of Traube's space, as he has already shown, but may be extended to many obscure cases constantly presenting themselves to the clinician.

In conclusion, it should be noted that the thick muscular masses on both sides of the spinal column are good conductors of sound, and may lead to an erroneous conclusion when percussed by the resonant method; but if the scapular line be taken as a guide, there is less risk of error.

Clinical Records.

CASE OF INTESTINAL FISTULA, PROBABLY JEJUNAL. (a)

Under the care of **Hy. M. Church, M.D., F.R.C.P.Ed.**

The patient was a lady, æt. 46, who had been operated upon for acute obstruction of the bowels, with stercoraceous vomiting, in 1884. Finding that he could not relieve the obstruction otherwise, the operator had made an artificial anus, and the patient had lived for eight years, during the last of which she was under Dr. Church's care. He quoted Mr. Golding Bird's case of jejunostomy for malignant stricture of the pylorus, in which an attempt was made to prolong life by artificial feeding through an intestinal fistula. In this case no food whatever was given by the mouth, and no regurgitation ever took place from the bowel, but as the patient lived only for nine days after the operation no definite information was yielded by the case. In Dr. Church's patient the chief distress was caused by the extremely irritating digestive effect of the pancreatic juice on the skin. The fistula was of such a size as just to admit the tip of the little finger, and was situated about an inch above the umbilicus in the middle line. It was constantly surrounded by a zone of excoriated and inflamed skin, over which the watery odourless pancreatic secretion trickled. Morphia was found of the greatest service in treating the case—it was food to the patient, and dried up the secretion of pancreatic juice in a wonderful manner. Its sole disadvantage was its anti-sialogogue action, which kept the patient constantly thirsty. Caffeine-citrate was given in 5 gr. doses for headache, but immediately increased the flow of saliva and of the pancreatic secretion from the fistula. In larger doses it gave direct evidence of being a gastro-intestinal irritant. In small doses rhubarb checked the discharge completely for three or four hours, and then escaped by the fistula. Castor-oil proved an active and non-irritating purgative, acting in from one and a half to two hours. Alcohol invariably increased the flow from the bowel, and had therefore to be denied to the patient. Many years of experience had told the patient that vegetable diet always disagreed, and that a purely proteid diet was best tolerated. The painful condition of the skin was best relieved by the application of tannic acid and vaseline. Dr. Church also referred to Dr. MacFadyean's observations on his case of fistula at the lower end of the ileum.

An inquest was recently held on a woman, æt. 36, who died from pleuro-pneumonia, associated with phosphorus-necrosis of the jaw. She had worked at Bryant and May's for seventeen years.

Transactions of Societies.

OBSTETRICAL SOCIETY OF LONDON.

MEETING HELD ON WEDNESDAY, JULY 2ND, 1902.

Peter Horrocks, M.D., President, in the Chair.

A FATAL CASE OF ECLAMPSIA.

Dr. **Bell** read a short paper on a fatal case of eclampsia, in which an autopsy was made, and he showed the liver and microscopic sections of the liver and kidney. The patient, a single woman, æt. 21, was brought into St. Thomas's Hospital in a state of coma. Prodromata of eclampsia in the form of headaches, &c., came on in the fifth month. In the eighth month coma came on, and she was then taken into hospital. Only a trace of albumin was found in the urine. Delivery was effected by dilating the cervix with Champetier de Ribes' bag, and extracting the child with forceps. There was not much hæmorrhage, but the patient became faint; after a copious venous transfusion she rallied. On the next day she developed jaundice and a temperature of 102° F. Two days later the pulse suddenly failed, and she died. At the post mortem the liver showed two large infarcts, and microscopically it presented the characters of the early stages of acute yellow atrophy, there being a great deal of fatty deposit both in the liver and in the kidneys. Some blood serum was injected into two guinea-pigs, which died within twenty-four hours. As a control experiment the blood of two uræmic cases which happened to be in the hospital at the same time was injected into two other guinea-pigs, without any result. Pathologically the case was one of acute yellow atrophy, though clinically it was one of eclampsia; at the same time, some of the microscopical characters were not entirely typical of acute yellow atrophy. Thus there was less infiltration round the portal vein than was commonly met with in this condition; and there was more fat than usual. It was probable that they would have to recognise two kinds of eclampsia: (1) The more usual form associated with unhealthy kidneys and the imperfect elimination of toxins; (2) cases in which there was an excessive production of toxins, the renal elimination not being much less than normal. The present case was probably of the second type.

Dr. **Cullingworth** said that when more was known of the toxæmia of pregnancy, this case would probably form a link between the two conditions of eclampsia and acute yellow atrophy of the liver. He called attention to the large size of the infarcts in the liver, one of which measured about three inches by two and a-half inches in diameter.

Dr. **T. W. Eden** remarked that there was now much evidence to hand to show that cases of eclampsia would have to be grouped in two classes, the renal and the hepatic. The latter had not always been well recognised. He had given some attention to the experimental work that had been done on this subject; and the results were rather confusing. If it were admitted that the condition was due to toxæmia, they had only carried the question back one stage, for the toxæmia was a symptom of which they wanted to know both the cause and the nature. Thus the toxins might be the result, and not the cause of the hepatic changes. It was most important that they should get to know the nature of these toxins, and for the elucidation of this question they would have to look to the physiological chemist.

Dr. **Drummond Robinson** said that he had injected the filtered serum from one case of eclampsia into two pregnant guinea-pigs; they were in no way affected, but went through a normal delivery at term.

Dr. **Amand Routh** thought that this case differed from acute yellow atrophy, in that the liver was not atrophied. He had seen two instances of this disease, in both the liver dulness was markedly diminished.

Dr. **Williamson** mentioned a case rather similar in the one related, and Dr. **Bell** replied

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(a) Read before the Edinburgh Medico-Chirurgical Society, July 2nd, 1902.

RETROPERITONEAL FATTY TUMOUR.

Mr. **Alban Doran** showed a specimen of a very large retroperitoneal lipoma. On the right side it was intimately connected with the kidney, which occupied a pelvic position, and was removed with the tumour. On the left side no trace of kidney was found. The patient died of suppression of urine. Mr. Doran briefly referred to the literature of the subject, which tended to show that these were most dangerous tumours to interfere with, as nearly every case operated on had died.

Dr. **Herbert Spencer** had met with a similar case, which also died soon after operation. The tumour was giving very little trouble, but it looked as if it could be removed without trouble, and this proved to be the case. But the patient died on the sixth day.

Dr. **Arthur Giles** remarked that the intimate relation of the tumour with the right kidney suggested the possibility that it might have arisen in the suprarenal capsule, and he asked Mr. Doran whether he had any evidence that shed light on this point. It would appear that there was little if anything to show the nature of these tumours before their removal was commenced, and once begun it was absolutely necessary to go through with it.

Mr. **Doran**, in reply, said that it was possible that the tumour originated in the suprarenal capsule, but a microscopic examination would be made to determine the question.

OVARIAN TUMOUR COMPLICATING DELIVERY.

Mr. J. W. **Taylor** (Birmingham) read a paper on this subject. The patient, æt. 30, was at the end of her second pregnancy, and an ovarian cyst impacted in the pelvis obstructed labour. He deliberated whether to remove it through the vagina or through the abdomen, but decided on the vaginal route. As soon as he had removed the cyst he applied forceps and completed delivery. The mother and child both did well.

The **President** thought that the objection to the vaginal route was that one might meet with a case in which one could not empty the cyst or draw it down into the vagina. He had seen a case in which he operated in this way; the cyst had three loculi containing pus. He could not completely empty the cyst, but delivered the child. The mother developed an abscess later on.

Dr. **Herbert Spencer** agreed with the President that the abdominal route was on the whole preferable, especially as it by no means necessitated Cæsarean section. In a case of his own he drew the uterus out of the wound, removed the cyst, and extracted the child with forceps in the usual way, while the uterus was out of the abdomen; he then replaced the uterus and sewed up. The case did well.

Dr. **Galabin** said that there was a third way of treating these cases, namely, by aspiration; he had done this in one instance, and then performed ovariotomy two weeks later. He was prepared to find that the tapping had led to the formation of adhesions; but this did not prove to be the case.

Dr. **Heywood Smith** remarked that eighteen years ago he had a case which he treated in the way suggested by Dr. Galabin, namely, by aspiration. He lost sight of the patient till she was again pregnant, and he then performed ovariotomy at the third month.

Dr. **Handfield Jones** said that he had had two cases of labour obstructed by a dermoid; the abdominal route was adopted in both cases; both had dense intestinal adhesions.

Mr. **Taylor**, in reply, said that it appeared to him that his patient was in a better position than Dr. Spencer's, since the latter had a long abdominal incision with a great risk of hernia; his own case had no scar.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Meeting held Wednesday, July 2nd, 1902.

Sir **Thomas Fraser**, President, in the Chair.

Dr. **Chalmers Watson** showed a case of lupus vulgaris under treatment by myelocene, and photographs of cases of psoriasis and lupus showing the results of treatment by this substance.

Mr. **Robert Purves** showed (1) Femoral artery ruptured by constriction of the thigh by running rope, the torn end of the artery sealed by natural arrest of hæmorrhage. (2) Section showing the deposit of iron in the tissues in the vicinity of a fragment of steel lodged in the forearm.

Mr. **Alexis Thomson** showed (1) Depressed fracture of the skull sustained twenty years before death. (2) Intestines showing strangulation by a band.

Dr. **Francis Boyd** read a paper on "Fallacies in the Copper Reduction Test for Sugar in the Urine," an abstract of which appears in another column, under the heading of "Original Communications."

Dr. R. A. **Fleming** read a paper on

THE PERIPHERAL THEORY OF NERVE REGENERATION,

with special reference to peripheral neuritis, which will be found on page 32.

Dr. H. M. **Church** read notes on a case of "Intestinal Fistula, probably Jejunal," which will be found under "Clinical Records" on page 34.

THE SOCIETY FOR THE STUDY OF DISEASE IN CHILDREN.

Provincial Meeting at the Children's Hospital, Manchester, held June 21st, 1902.

Dr. **Henry Ashby** in the Chair.

Dr. A. E. **Sansom** read a paper on

HEART DISEASE IN CHILDREN.

He said the chief affections of the organ were rheumatic but not always, and were not often associated with painful and diseased joints. The chief groups of them are: 1, the temporarily swollen and enlarged heart of rheumatism; 2, the heart of rheumatic pericarditis; 3, the heart of rheumatic endocarditis with resulting valvular disease; 4, the heart of slow and insidious rheumatic endocarditis inducing mitral stenosis.

Dr. E. **Cautley** showed a specimen of atresia of the conus pulmonalis and patency of the septum ventriculorum. The child died at twelve months of age from cardiac failure during an attack of dyspnœa. Dr. Cautley thought cases of congenital heart disease should be divided into two groups, those due to developmental error and those due to fœtal endocarditis. Occasionally the two factors might be co-existent. He regarded congenital syphilis as the first cause of developmental error.

Dr. **Theodore Fisher** thought the most striking feature of heart disease in children was pericarditis. Dilatation, slight in amount, occurring in rheumatism was not serious. He thought myocarditis and pericarditis showed that the heart was poisoned as a whole. He agreed with Dr. Cautley's classification of congenital heart disease. A patent foramen ovale was very common, and could be found in one-fourth of adult necropsies, if it were looked for.

Mr. W. P. **Montgomery** (Manchester) read a paper on the results of

TENDON-TRANSPLANTATION

in twenty-five cases of infantile paralysis of the lower extremity. The cases were classified into various groups, and the results of the various methods employed were given. The work of re-education was often very slow, but the final state good. A number of cases were shown in the wards prior to the meeting.

Dr. **Gwynne**, of Sheffield, read the notes of a case of

INFANTILE PARALYSIS OF THE LEG

which he had treated by excision of the knee, ankle and tarsal joints. The result was most satisfactory, and the boy could walk well though with a stiff leg, but without any evidence of deformity beyond some shortening.

Mr. R. **Clement Lucas** spoke of the old-fashioned way of treating such cases by tenotomy, with results which were not encouraging, and of the great advance of the present methods. He had himself done more in the way of excising the bone in the extreme cases of deformity than had been done in the present series.

Mr. **WALTER EDMUNDS** thought the cases were very successful, and regretted the shortness of the time at the disposal of the Society for discussion.

Mr. **JOSEPH COLLIER** (Manchester) agreed that the best way was to graft tendon on to periosteum if that could be done and the tendon were long enough. He had more experience of arthrodesis in cases where the limb was flail-like.

Mr. **R. CLEMENT LUCAS** read the following communication.

A CASE OF DISPLACEMENT OF BOTH TESTES IN PERINÆO,

with an inguino perinæal hernia on the right side. No deformity had been noticed till the sudden descent of a hernia on the right side at the age of three years drew attention to the displacements. A photograph showing the double displacement was exhibited. A radical cure of the hernia and replacement of the testes had been effected.

Mr. **SYDNEY STEPHENSON** related a series of cases in infants who while suffering from symptoms indicative of posterior basal meningitis became blind without ophthalmoscopic changes. Sight was ultimately completely recovered. The title of the paper was

FLEETING AMAUROSES IN CHILDREN PRESENTING SYMPTOMS OF MENINGITIS.

Mr. **R. C. DUN** (Liverpool) read notes of a case of

HYPERTROPHY OF THE RIGHT GREAT TOE,

showing radiograms, photographs and a cast of the foot of the case. The deformity occurred in a girl, æt. 7½, and no overgrowth was noticed until the child was five years old. The whole of the tissues of the toe were increased, the bones taking part in the hypertrophy. The greatest development was of a lipomatous nature. A definite fatty mass was present on the dorsal surface of the terminal phalanx.

Mr. **LUCAS** said many such cases of hypertrophy were nævoid lipomata, and asked if there was any nævoid condition of the toe, and Mr. **DUN** replied that there was not.

After a vote of thanks to the Chairman and the hospital authorities for the use of the hospital the meeting terminated.

Germany.

[FROM OUR OWN CORRESPONDENT.]

BERLIN, July 5th, 1902.

THE PATHOGENESIS OF BASEDOW'S DISEASE.

The *Deutsch Med. Zeitung*, June 26th, has a preliminary communication by Dr. Tedeschi on this subject.

The author has already performed the operation on the corpora rectiformis, not on rabbits but on young dogs, which appear to be very suitable subjects.

The result was that from three to five hours after the injury to the corpora rectiformis, sometimes even earlier, exophthalmos and tachycardia came on. There were always, in addition, general tremor and polyuria, glycosuria, and copious salivation. These symptoms increased up to the third day, and thenceforth they gradually receded. As regarded the behaviour of the pupils there was dilatation, but it disappeared quickly.

The autopsies showed that the most suitable spot for setting up the above-named train of symptoms was the anterior part of the corpora rectiformia just behind the tuberculum acousticum.

At the Medical Society's meeting, June 18th, a

CASE OF SPINAL TUMOUR TREATED BY OPERATION

was shown by Hr. Oppenheim.

A young lady of healthy family had a fall from a cycle, from which, however, no immediate injury was perceived. After some time, however, persistent pains appeared in the right hypogastric region, which resisted all efforts to remove them. Then appeared weakness in the legs, particularly in the right, so that the patient could only walk with difficulty. When the speaker first saw her there was scoliosis of the dorsal vertebræ, but no tenderness of the spines. There was anæsthesia of the right lower abdomen, flabbiness of the muscles, weakness of the legs, exaggeration of the reflexes. For a time she was under other treatment, during which extension was made which excited great pain.

On April 19th an examination was made in consultation with Hr. Jolly. There were then pains in the region of the ninth to the eleventh dorsal roots on the right side, only occasionally very severe. Scoliosis of the lower dorsal vertebræ, no tenderness on pressure on the processes. In the same region sensibility for nearly all stimuli was almost abolished. There was anæsthesia of the lip also, but it only extended 2 cm. upwards.

The abdominal reflex was absent below the umbilicus, but above it was weak on the right side, distinct on the left. There was reaction of degeneration on the right side.

In both legs there was spastic paresis, exaggeration of patellar reflexes, distinct ankle clonus. The gait was dragging, the patient only being able to walk a few yards, and that only with support. Micturition at times difficult. Diagnosis of a new growth in the spinal column was not difficult, but there was doubt as to the actual spot.

It was concluded that the upper pole of the growth lay in the region of the ninth dorsal root.

The eighth rib was therefore removed by Sonnenburg, the operation being rendered difficult by the scoliosis. As soon as the dura was reached, it sprang forwards, and when both succeeding vertebral arches were removed and the dural sac opened a tumour came into view, which encircled the cord from the right and behind, and was removed without cutting. The course of the wound was normal. At first there was free exit of cerebrospinal fluid, then came on constipation with meteorism from the fourth to the fifth day, and after that there was no further disturbance. All the symptoms improved within a few days. After a month she tried to walk, which she did very badly at first, but now without any trouble. The scoliosis also disappeared. The only thing now amiss with the patient is some exaggeration of the tendon reflexes and a diminution of the sense of position of the legs. The tumour was a benign one, but there is the possibility of others remaining.

Austria.

[FROM OUR OWN CORRESPONDENT.]

VIENNA, July 5th, 1902.

CONCUSSION OF THE BRAIN.

AT the meeting of the Prague Medical Society, Trnka gave a history of the epicrisis of a case he had under his care.

The patient was a soldier who received a kick on the side of his head from his horse. For three weeks after the accident the symptoms had all the appearance of simple concussion of the brain, which gradually improved, and to all appearance the man was convalescent.

Suddenly an apoplectic fit came on, followed by all the symptoms of bulbar paralysis, with motor paralysis of the extremities and glossopharyngeolabialis mischief, later on phenomena of the pons became prominent, and the patient died about two months after the accident.

The post-mortem examination revealed a hæmatoma about the size of a hazel nut in the right cerebral artery which extended to the medulla oblongata and pons. The kick had apparently been given on the mastoid process, and the vascular lesion been by *contrecoup* with subsequent or secondary apoplexy which determined doubt.

VAGINAL CARCINOMA.

Kleinhaus brought forward a case of carcinoma of the vagina, which he considered important owing to its atypical position on the anterior margin of the orifice. Along with this he exhibited a patient with inversion of the vagina, partial prolapses of the uterus, with elongated cervix. The prolapsed portion formed a swelling larger than the head of a child.

THE HEIDEN TREATMENT.

Frank next read a paper on Frenkel's treatment at Heiden. He said that Frenkel did not treat tabes dorsalis as such, nor the symptoms of ataxia, but aimed at the restoration of co-ordination, and as far as possible the recovery of the movements, while preserving the strength of the muscles. The latter part of this method is highly esteemed by Frenkel as the ataxic movement is a drag on the muscular force, and masks the feeling of weariness which allows the muscles to exhaust themselves and subsequently prove eminently dangerous to the life of the patient. He gives careful doses and keeps a rigid control over the frequency of the pulse; when it begins to rise the treatment is suspended. Frank related some of the cases he saw treated which were greatly improved in two or three weeks with three to five minutes twice a day. Although these patients were quite unable to stand at the commencement of the treatment after four weeks teaching they could walk with perfect confidence. Frenkel discards every sort of machine or apparatus in bed, and simply uses encouragement and practice on steps or extemporised stairs in a large hall where seats of different heights are arranged for different exercises.

In the discussion that followed Otto Wiener related a case of tabes which had been treated according to Frenkel's method, in which the patient during the treatment suffered from severe lancinating pain, which pyramidon, so highly praised by Frank, did not relieve while lactophenin cured it! It is fair to say that this patient had undergone the Nauheim cure with excellent results. While confined to bed he forgot the whole of his teaching for the tabes, and it is not at all comforting to know that Frenkel's treatment is so transitory.

Funke was in favour of apparatus, which he affirms to be quite indispensable to the successful treatment of the disease, as he has found by long experience that personal influence soon becomes inoperative in refractory cases. Again, the pulse frequency is no guide to the exhaustion of the muscles.

THREE performances of "The Gondoliers" will be given on July 10th, 11th, and 12th, at Ladbrooke Hall, Notting Hill, on behalf of the funds of the Tottenham Hospital.

Continental Health Resorts.

[FROM OUR SPECIAL CORRESPONDENT.]

BRIDES-SALINS.

UNDER the name of Brides-Salins are included two spas ("Brides-les-Bains and Salins-Moutiers"), about two miles apart, and quite different in character of waters, but under the same management.

Brides-les-Bains is the more prominent; the chief hotels, Casino, the Direction of the Company, and the residences of the French and English physicians being here. It is situated at an altitude of 1,900 feet, in a charming valley of the Tarentaise Alps, and at the junction of two impetuous mountain streams. Environed by green hills and woods, in an atmosphere ozonised and vivified amidst the mountains, and offering in its near vicinity a variety of Alpine excursions, easy or difficult, as each visitor may prefer, with the daily music and other *diversions* common to Continental summer-resorts, and the choice of half-a-dozen good hotels, Brides annually attracting greater attention.

It is by no means a new thermal station. From the vestiges of Gallo-Roman thermes it was evidently known in the imperial days of Rome, and there are records proving its popularity in the sixteenth and seventeenth centuries. The springs appear to have been diverted and lost by mountain avalanches or cataclysms about the commencement of the eighteenth century, and not to have been re-discovered until early in the last century. We find them mentioned by a traveller in 1817, and in 1830 they were again publicly used. Since then, but very slowly, Brides has gradually risen in appreciation, but even to-day it is by no means as well known or as much appreciated as the genuine merits of its mineral waters deserve. Especially to the British and American public is it far too little known, and particularly so to those who frequent the Carlsbad and some other similar springs. Brides is more readily reached from London and Paris, more attractive in its surroundings, less costly in every way, and less violent and dangerous in its effects.

The mineral springs at Brides come to the surface on the left bank of the Doron River, and have a specific gravity of 1¼° Baume, and a temperature of 95° Fahrenheit. Their mineralisation is 6·18 gr. per litre, and their flow 80,000 gallons in twenty-four hours. They contain sulphates, chloride of sodium, and magnesia of iron. In each litre are 5·09 gr. of purgative salts (sulphates of soda, lime, magnesia, &c.) The French medical authorities state them to be *toni-purgatives, chlorurées-sodiques, magnesiennes, calciques;* and recommend them specially for liver maladies, abdominal enlargements, gastric troubles, dysentery, constipation, urinary catarrhs, hæmorrhoids, cerebral congestions, migraines, anæmias, heart diseases, hypertrophy of the spleen, diabetes, and obesity.

From the efficiency of its waters in cases of obesity and diabetes it has long been customary on the Continent to call Brides "the French Carlsbad." To this title more recently has been added the claim to be styled "the Nauheim of France," because of the successful treatment here of heart diseases. Taken in small quantities of one to three glasses the Brides mineral-waters are tonic and aperitive; taken in larger quantities (of four to six glasses) they are laxative, purifying, purgative, and diuretic.

In his report to the French Government in 1874, Dr. Jules Lefort states:—" The great peculiarity about these waters is their complete and inimitable union of purgative and tonic properties. This double action favours the secretions and the circulation of the digestive tube and its adjoining parts *without debilitating* (as might otherwise be the case with saline purgatives often repeated); and, on the contrary, building up again the constitution by exciting appetite, and *without injury to the state of the blood or to nutrition* (as with alkaline waters and carbonates of sodium.)"

For this reason it is claimed these waters may be drank and well-digested for a long time, a great advantage over other mineral waters too irritating in their action to be continued many days successively.

In his able treatise on the mineral waters of Savoy, the late Dr. F. Bertier, of Aix-les-Bains, recommends a sojourn at Brides as an admirable *after-cure* for those who have taken a course of treatment at Aix; and also Brides-Salins as health stations eminently efficacious for all who, having long resided in hot climates, suffer from liver and spleen complaints.

The Operating Theatres.

ROYAL FREE HOSPITAL.

Acute Appendicitis.—Mr. E. W. Roughton operated on a man, æt. 19, who had been admitted with a history of pain in the abdomen of three days' duration. On admission to the hospital his symptoms were but slightly marked, and during the first two days he steadily improved, both the temperature and the pulse becoming almost normal, but on the third day his pulse became much more frequent, the temperature again rose and his general condition became decidedly worse. An operation was therefore decided upon. On opening the abdomen in the right iliac region a small abscess containing two or three drachms of pus was evacuated and the stump of the appendix was visible, the extremity of it having sloughed off. The affected area was not completely shut off from the general peritoneal cavity. Gauze drains were inserted and the wound left open. Mr. Roughton said the great point of interest was the deceptive appearance of convalescence after admission; he certainly thought the patient would get well, and that the usual operation for removal of the appendix might be performed in the course of a few days, but this expectation was quite falsified by the subsequent progress of the case. He regarded the prognosis as grave on account of the bad general condition of the patient, and the fact that the general peritoneal cavity was not shut off. Although the stump of the appendix presented in the wound he did not remove it because he thought the risk of so doing would be greater than the advantage the patient might derive from it.

The man died two days afterwards, and the post-mortem showed that there was a large collection of pus in the pelvis. Mr. Roughton thought that, looking back on the whole case, it would have been undoubtedly better in this instance if the operation had been performed at once on the patient's admission. The case he considered really afforded an argument in favour of the American practice of immediate operation in all acute severe cases of appendicitis.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 9, 1902.

MODERN VIEWS ON APPENDICITIS.

At the meeting of the American Medical Association, which took place early this month, the perennial subject of the treatment of appendicitis received, as usual, a large amount of attention. The mortality does not appear to have been influenced in any appreciable degree by the age of the patient, the prognosis depending upon the condition of the parts in respect of abscess formation, gangrene of the appendix, co-existing peritonitis, and local damage. Further illustrations were afforded of the insidiousness with which apparently mild cases become purulent, the ordinary symptoms of suppuration being either absent or so trivial as to escape attention unless specially looked for. Most surgeons now examine the blood in order to infer the presence of pus from leucocytosis, although, according to American views, the surgeon ought not to wait for suppuration to take place before operating. We do not attach the importance which some surgeons do to the great difference between the mortality of operations undertaken during the acute and the chronic stages respectively, because the very existence of an acute appendicular abscess constitutes such a great element of danger quite apart from the question of the operation. In time to come, no doubt, the fact of an attack of appendicitis having been allowed to progress to the stage of suppuration will be held to imply either that the patient has failed to seek assistance in time or that the practitioner has failed to do his duty. Another point of interest is the extremely small proportion of cases of appendicitis in which recovery is not followed by subsequent recurrence, even a violent attack often failing to secure such immunity. No two cases of appendicitis appear to be exactly alike, and this variability, which applies equally to the symptomatology and to the anatomical relations of the parts, explains the long list of difficulties which are apt to confront the operator. One disadvantage of operating after suppuration has taken place is that the circumstances rarely allow of the operator discovering and removing the diseased appendix, thus leaving a focus of infection behind, a fact which greatly affects the prognosis in such cases. Moreover, the damage which suppuration causes to the neighbouring structures often entails subsequent trouble, among which ventral hernia is one of the most frequent, though not the most dangerous. It is urged that the use of the ambiguous term "perityphlitis" ought never to be used, in that it merely states a clinical fact without specifying the exact nature of the mischief. It is open to question whether there be such a disease as perityphlitis apart from appendicular infection, and the use of the less distinctive term is apt to blind the practitioner to the precise significance of the lesion. The expectant attitude is still in favour in this country, and it would be interesting to compare the statistics of American surgeons *en bloc* with our own, although it must be admitted the marked individuality of cases of appendicitis renders accurate data for comparison almost impossible to procure.

QUACKS AND QUACK MEDICINE.

DURING the recent debates in the Commons upon the Midwives Bill the protection of the public against unskilled practice formed the main basis of the supporters of that measure. If that principle is to be logically followed up by the Legislature the attention of Parliament will speedily be directed to irregular medical practice and the sale of quack and patent medicines. Those two evils together cause an incalculable amount of harm to his Majesty's lieges in all parts of the Empire. It seems likely, moreover, that these nefarious industries were never in a more flourishing state. Quack specialists for skin, cancer, rheumatism, diseases of the eye and nervous system, bonesetters, herbalists, and a host of other parasites infest the rich and fashionable quarters of our great towns, while whole fortunes are spent in the simple advertising of this or that nostrum, which professes to cure one or more, perhaps a dozen, serious disorders. Curiously enough, there never was a time when legitimate medicine had reached a sounder and more comprehensive knowledge of diseased processes and of the powers and the limitations of curative methods. At this precise point in the world's progress, however, shameless and wanton imposture is carried on without let or hindrance in our midst. The police look on with indifference, and Government takes no heed of the matter, except to legalise the introduction of a new class of hybrid medical practitioners in the shape of licensed midwives. Surely if the parturient woman is worthy of protection against the pretensions of ignorant midwives, so also should the patient afflicted with cancer or deafness be protected from charlatans. Yet numerous unqualified ear and eye practitioners drive a thriving trade in the United Kingdom, although the two branches of practice involved demand the highest development of special skill and training, and are fraught with the gravest results to patients themselves. Infallible cures for kidney disease are freely advertised, although it is certain from a medical point of view that there is no cure for chronic renal affections. What have the sentimental upholders of the Midwives Bill to say of the sale of nostrums warranted to cure incurable kidney diseases? If they are right in protecting parturient women, surely they would not be wrong in protecting the large section of mankind afflicted with chronic diseases of the kidney. There would be no need to apply for any great amount of fresh legislation were our police to use the powers already vested in their hands. Were the police to follow up carefully the records of the police and the coroner's courts, and systematically to inquire into all suspicious advertisements, they would find no lack of cases in which to prosecute. The registrars of births and deaths, again, might furnish valuable information to the police. It seems not unlikely, moreover, that an immense amount of good might be done by prosecutions for obtaining money under false pretences, an offence which is committed by every charlatan who claims to cure incurable conditions. In Germany, it has been estimated that in ten years the population has increased 58 per cent., regular medical men 76 per cent., and quacks 1,567 per cent. Of 123 such unqualified persons summoned in Berlin, thirty had been domestic servants, forty-five artisans, sixteen clerks, and twenty-four had a fairly good education. Of 130 female quacks, only one was an educated person, sixty had been servant girls, twenty-four dressmakers, ten charwomen, and five nurses. Nearly 30 per cent. of the men had been in gaol, and of the women 15 per cent. More than 100 samples of quack medicines were analysed by the police, and over 80 per cent. contained elements of absolutely no medicinal value. From such sources the army of unqualified practitioners in Germany is drawn and equipped, and there is good reason for believing that investigation would reveal much the same state of affairs in the United Kingdom. Clearly, the education of the people, about which so much is heard nowadays, has not yet matured the popular judgment in the matter of the treatment of disease. An amendment of the Medical Acts whereby the control of unqualified practice should be made a reality, would yield more solid benefit to the community than a score of wars in remote corners of the world.

INJURIES OF VEINS.

IN selecting the surgery of the circulatory system as the subject of his Introductory Address before the Royal Academy of Medicine, Madrid, His Excellency, Dr. Don Alejandre San Martin y Satinstegal made choice of a subject that has not received the attention it deserves, and one well calculated to call into play his familiarity with European medical literature, past and present, and it is interesting to note in this connection he credits Lambert, an English writer of the eighteenth century, with the credit of introducing the surgical treatment of wounds of veins. The tolerance of veins to surgical interference is the keynote of the address. For untold years, from the rude Celt surgery of prehistoric man down to the days of the country phlebotomist, who traversed the country practising phlebotomy every spring and autumn, and spaying pigs, human veins have been submitted to the rudest surgery and withal, how seldom was phlebitis found to follow the injury. Accidental wounds of the veins in which the flow of blood was arrested by pressure, oftimes applied in the way well calculated to produce inflammation, yet how seldom has it followed, even in cases of injury to the jugular, iliac, or femoral? Lambert pondered on these things, and meeting with an aneurysmal varix he operated by joining the extremities of the vein together and the extremities of the artery. His operation was a success, but unfortunately others were not so successful, and the operation and the book of Lambert passed from memory. There were, however, still surgeons who thought for themselves, and Czerny in a case in which the internal jugular was wounded (1881) put in a few sutures; unfortunately the patient succumbed to septicæmia, and for years no further attempt was made to suture a wounded vein until Schede (1892) sutured the femoral, and soon afterwards the lateral wall of the inferior vena cava. Operative interference in wounds of veins was, however, not firmly based on a scientific basis until Burci (1894), at the International Surgical Congress in Rome, demonstrated the regenerative process in wounds of veins. They form a thrombus intra- and extra-vascular which quickly and firmly becomes organised. Señor San Martin himself has placed on record one of the most successful and brilliant of these operations by reuniting the cut extremities of the axillary vein, which was wounded in the removal of an enormous subscapular angioma. In none of the cases of operation on the internal jugular, femoral or axillary, was there secondary bleeding, thrombosis or emboli as a result, and in not a single case did air enter into the blood currents. There is no occasion to multiply illustrations of the safety and facility with which the operation may be performed. But we cannot refrain from describing, though briefly, the ingenious method of Knemmel, who, in excising a large neoplasm that extended across the thigh immediately inferior to Poupart's ligament, found he had wounded both an enlarged femoral and saphenous vein. Both vessels were cut across. He immediately clamped them and sutured the cut extremities, and then surrounded the vessels at their point of juncture with a fine layer of sterilised gum. Payer (1901) has since then, in the case of a patient of seventy-seven years old, when excising a malignant tumour, cut the femoral vein, invaginated the extremities, sutured them, and placed at the point of suture a very thin magnesium ring. Thus we find that almost two hundred years after his book appeared Lambert's rational method of treating injured veins is once more publicly advocated, and in all the principal Continental schools his teachings are bearing fruit; but at home with us it has never secured that recognition as an accepted surgical procedure that the distinguished orator, Señor San Martin, claims for it.

Notes on Current Topics.

The Operation upon the King.

The objectionable report of the operation upon his Majesty the King to which publicity was given in the issue of the *World* newspaper for July 2nd, has been the only discordant note sounded amid a nation's deep sympathy for the illness from which the King is now happily recovering. Not only did the imaginative account seek to minimise the skill and discount the responsibility of the operating surgeon, but it also sought to show that the procedure was one, so trivial in itself, that the reports as to the King's fortitude and resolution were unnecessarily exaggerated. We cannot understand how any public journal, professing to deal with facts, could have given currency, at such a time, to statements alike untrue, ill-natured, and irresponsible. Who was it who inspired the report? In seeking an answer to this query one is led to believe that it must have either been an individual who expected to receive a title from the King, and was disappointed, or it was a member of our own profession who, jealous of Sir Frederick Treves's handiwork and commanding position, was intent upon diverting from Sir Frederick some of that praise and recognition of services rendered which the public have bestowed on him. We can, however, only trust that our last surmise is incorrect, nevertheless, it is regretful to have to admit that medical men in their professional relationship towards each other, are not always given to displaying the best side of human nature. As a last word upon this scandalous incident, we may say that the Editor of the *World* has reason to be thankful that he is not a German subject and that his newspaper was not published in Germany, for if that had been the case, and he had published such a report of the German Emperor, quite likely he would now be under arrest.

The History of Enterectomy.

It is always interesting to follow the development of any surgical operation, beginning with its earliest and crudest form, and coming down to its latest and most complete adaptation. Nowadays we are too apt to look on surgery as being almost a modern art, incapable of great perfection were it not for the discoveries of anæsthetics and antiseptics. In no field is this more true than in that of abdominal surgery, and it comes on us as a surprise when we find that suture of wounded intestines was practised fifteen centuries before Christ by Egyptian and Arabian surgeons, who used the mandibles of black ants to bring the surfaces together. At the same period fumigation of the uterus was not an unknown treatment, forestalling what has recently been introduced as a new practice—the use of superheated steam in catarrh of this organ. From the time of Celsus, however, who details a method of suture of the intestine, little progress was made in the operation of enterectomy until Ramdohr, in 1727, successfully removed two feet of gangrenous gut. Bell, in 1794, improved on his method, and Lembert, in 1826, introduced the suture, which is still the favourite with most surgeons. Meanwhile, a year earlier, Reyhard used for the first time a mechanical aid in the shape of a flat plate of wood, which is passed with the fæces as soon as the sutures are cut, some days after the operation. In a paper by Dr. Stirling, of Melbourne, in the last number of the *Intercolonial Medical Journal* to hand, the later devices are enumerated in a tabular statement. There are, it appears, no less than twenty-one more or less different forms of suture, several methods of invagination, and twenty-nine kinds of mechanical aid, all in use at the present time.

A Layman's Advice to Doctors.

IT is often well to attempt to see ourselves as others see us. There is doubtless some reason in the oft-quoted remark that "doctors are more ready to give advice than to receive it." And yet it is true that medical men are widely criticised and their methods and manners openly discussed. It is impossible to live regardless of public opinion, and unwise to bolster up any custom or procedure under the sheltering "etiquette of the profession," unless such is for the good of all, and particularly in the best interests of sick humanity. We therefore venture to welcome the open criticism and kindly presented "advice" contained in a recent number of *The British Weekly*, the editor of which remarks that: "No one will dissent from the view that a fuller knowledge of human nature would make doctors or some of them, even more helpful than they are, and one way would be to listen attentively to what patients say about themselves. People can never be made to believe that they do not know more about themselves than anyone else can know. They delight in describing their sensations, in giving their family history, in laying the whole story of their hopes and fears before their adviser. We are told that there are many patients who simply want to be taken in hand and told what they should do. They have fallen into such a perplexity about life that they distrust their own judgment in every point, and they want a strong and skilful man to take charge of them, to make up his mind what they should do from the beginning of the day to its close, a statement the wisdom of which will be appreciated even to the youngest in the profession. Even more to the point: Whatever doubts and misgivings a physician may feel—and he must often be troubled by them—he should not show them. He should appear to be a man who knows his way. By watchfulness, no doubt, the truth will gradually be discovered, and many patients cease to trust their doctors because they have told them that the ailment perplexes them. The author's remarks anent the reluctance of certain medical men to accede to the desire of the friends for a second opinion, apply, we believe, to the very few. Perhaps the only part of this delightful essay to which any exception could be taken is that which deals with the "rule of the medical profession never to advertise." The article is sympathetic and may be read with advantage by all young practitioners; indeed, it may possibly save them many a disagreeable experience.

The Motor-Car in Medicine.

SOME time since we pointed out that when judiciously employed the motor-car might prove of immense service in the treatment of consumption and certain other affections. *The Car* now discovers that motor-car driving at a speed well up to the legal limit is specially suitable to those with consumptive tendency or those actually suffering from phthisis and may be of service in cases of insomnia, "liverishness," anæmia, "colds in the head," and for "persons who are suffering from worry and require their thoughts to be carried into pleasing and interesting channels." We hope that such like foolish and reckless advocacy will not hinder the proper use of motor-cars in the treatment of disease. There can be no doubt that the motor-car provides a means of regulated and quiet locomotion which might prove of the greatest service to many invalids and convalescents. We think many a hospital for the sick, institution for the crippled, and asylum for the mentally and physically feeble, would do well to add a suitable motor-car to the general equipment. To the sanatoria for the phthisical poor a motor-car would prove a most useful accessory. When our hospital authorities have learned the wisdom of establishing country branches the motor-car may be expected to solve many of the difficulties connected with the transit of patients, staff, and stores. Already medical men, the most conservative of mankind, are realising that in the motor-car they have the cheapest and most convenient form of carriage for all-round work. But as with drugs so with motors there is much judgment needed in the selection.

The Bibliography of Appendicitis.

AT a time when the calamitous malady of the King has drawn attention to that little appendage which Talamon has so fitly described as "un organe inutile et inusible," it is interesting to note that it is chiefly through the researches of English and American doctors that the various morbid conditions connected with the vermiform appendix have been brought to light, and measures for effectual treatment rendered possible. Dr. R. H. Fitz in 1886 furnished the first of the modern series of monographs on the subject, and introduced the term "appendicitis." Sir Frederick Treves, as far back as 1888, published an important communication on relapsing typhlitis treated by operation; and, as all the world knows, his subsequent work has been one of the chief means of elucidating the perplexities connected with the vagaries of the long-neglected cæcal appendix. The first book to be published on this subject was that written by Dr. T. N. Kelynack on "The Pathology of the Vermiform Appendix," and issued in 1893. It gives a full bibliography of all affections connected with this intestinal appendage up to 1893. Dr. Hawkins' work on "Diseases of the Vermiform Appendix" followed in 1895. In 1900, Mr. A. H. Tubby issued his concise little essay on "Appendicitis" in the "Medical Monograph Series." In the following year Mr. W. J. Walsham, of St. Bartholomew's Hospital, published some suggestive papers in THE MEDICAL PRESS AND CIRCULAR on "The Treatment of Appendicitis," which were reprinted in book form, and Mr. C. B. Lockwood issued some recent studies on "Appendicitis: Its Pathology and Surgery." Among recent American works that of Dr. John B. Deaver might be referred to, as well as a "Review of the History and Literature of Appendicitis," by Dr. George M. Edebohls, which appeared in the New York *Medical Record* for November 25th, 1899. Of course this must not be taken as a complete bibliography of the subject, but it is sufficient to show that it has attracted considerable attention of late.

Primitive Medicine.

MEDICINE and surgery are older arts than most people imagine, and there is probably no race, no matter how backward, which has not developed them to a high degree, if not always in the most fruitful direction. It has been recently pointed out that even as long ago as the Neolithic age, trephining was a common surgical operation, and out of twenty trephined skulls of that period examined by Dr. Prunieres, only one did not show signs of healing. M. Broca believes that the principal object of the operation was the cure of epilepsy. Even among birds a certain rude surgery has been noticed, for the snipe is known to set broken bones, and certain anthropoid apes were seen by Livingstone to stop bleeding by pressure of their fingers. Dr. Colquhoun, in his Presidential address to the New Zealand branch of the British Medical Association, has recently enumerated some facts of primitive medicine collected by various observers among the aborigines of Australia and the South Seas generally. Thus wounds are treated by a thorough sucking, followed by the application of *pridgerong*, a kind of resin exuding from the bark of trees. Abscesses are poulticed and lanced. Cold water baths and bleeding are practised in fevers. Two cases of tetanus are recorded as having recovered, the treatment being the formation of a urethral fistula. There is a wide-spread knowledge of the vegetable materia medica, certain plants being known for their cathartic, astringent, or emetic qualities. Side by side with these scientific practices is the belief that therapeutics is a magical art, and most therapeutic processes are accompanied by considerable ceremonial which is considered of great importance.

The Cocaine Habit.

MOST of us have at one time or other been brought into contact with the victim of the cocaine habit, and in too many cases it is feared that the taste for this drug has obtained its first hold by its injudicious administration by a medical man. Indeed, this remark holds true of other and commoner drug habits, such as the abuse of morphia and chloral, as well as of cocaine. Perhaps in no class of the community is the habit more to be found than among medical men and apothecaries, who, of course, have the easiest access to such drugs. In India, however, we learn that the cocaine habit is by no means confined to such classes, but is gradually spreading through all ranks of the native world. It seems that there is practically no block in that country on the sale of this poison, and that it can be bought in any quantity from the pettiest vendors in the native bazaars. It is bought in cheap confections by schoolboys, but its greatest consumption is among the girls and women of the zenanas. It is impossible to exaggerate the moral and physical ruin of the victim of this drug, the habitual use of which is much more deadly than that of either opium or alcohol. We quite agree with our contemporary, the *Indian Lancet*, that the time has come when Government must grapple seriously with the evil, and no matter what difficulties stand in the way, make the abuse of cocaine an impossibility in India.

The Exercise Value of Dancing.

DANCING is a pastime proper to the seasons unfavourable to outdoor sports, and apart from its social advantages it is entitled to regard if only by reason of the muscular exercise which it entails, since this is indispensable to health. A correspondent, also an amateur statistician, has taken the trouble to calculate the distance covered by dancers in their gyrations. He finds that a valse of average duration represents approximately a run of a thousand yards. This is the longest dance, with the exception of the quadrille, which, with its four figures, covers nearly 1,800 yards. The mazurka is only equivalent to about 900 yards, and the polka to 800, while the lazy *pas de quatre* is barely 700 yards. Carrying his statistical ingenuity still further he estimates that the usual series of dances at an ordinary ball, beginning at 10 p.m. and finishing at 5 a.m., represents no less than 56,000 steps, equivalent to nearly 25 miles on level ground. Admitting that the dancers are few in these degenerate days who go conscientiously through the entire list of dances provided for their entertainment, the fact remains that each man (and woman) who does his (or her) duty accomplishes a very respectable amount of exhilarating exercise. The value of exercise from a physiological point of view is greatly enhanced by its exhilarating effects, and this is one reason why the daily "constitutional" fails to yield the health-giving effects of cycling, golf or dancing, the only drawback to the last named being the lack of fresh air and sunlight, which add so materially to the enjoyment and salutary effects of all forms of outdoor exercise.

Persistence of Infection in Typhoid.

IT is a matter of great importance, both to the practitioner and to the medical officer of health, to have some test as the length of time for which infection persists in the various infectious diseases, and perhaps there are few points on which there is so little agreement or certainty. Thus the diphtheria bacillus has been found in the mouths of children months after they have recovered from the disease, though it is of course possible that the organisms have so far lost their virulence as to be practically non-pathogenic. In typhoid, too, it is as a rule difficult to find the bacilli in the fæces at any but an early period of the disease, and it was consequently assumed that the infectivity has diminished and disappeared early. This convenient assumption, however, received a blow when it was shown that the bacilli appear in the urine up to the seventieth day of the disease and often much later. An outbreak of milk-born typhoid reported by Dr. Jamieson, the Health Officer for Melbourne (*Australasian Medical Gazette*, April, 1902), bears out this belief in a prolonged duration of typhoid infection. A dairy-keeper who became ill on December 1st, 1900, returned home from hospital on January 15, 1901, but did not immediately start work. On March 4th, however, a case of typhoid was reported, which in common with five others within a couple of weeks, were undoubtedly traced to the milk supply from this dairy. In this case, assuming that the infection was due to the case of December, as seems almost certain, the infectivity lasted for nearly four months from the beginning of the disease.

A Dangerous Disinfectant.

THE available number of desirable disinfectants is extremely small, and there is a wide field still open to scientific chemistry in that eminently practical direction. The drawbacks of such substances commonly lie in their poisonous and irritant nature, their insolubility, bulk, unpleasant smell and other physical inconveniences. Explosiveness, however, is one of the last charges we would expect to have levelled against a disinfectant. For all that, it appears that chlorinated lime is open to that objection. When freshly made the powder is somewhat unstable, and if packed before a sufficient time has elapsed to allow of its gaining a condition of stability, it is apt to become explosive. This fact came into unpleasant prominence when, last November, the wife of a Commander in the Navy opened a tin of chlorinated lime bought from the Army and Navy Stores, London. The stuff flew into her eyes and did a good deal of damage, which, happily, it seems, will not be permanent. There was the usual conflict of expert evidence at the ensuing trial in the King's Bench Division, but the jury awarded the plaintiff £172 as *solatium*. It may safely be assured that manufacturers and vendors of chlorinated lime will take care that the stuff is properly seasoned before being packed.

Coronation Stands and Hospitals.

THE approach of the Coronation saw London covered with enormous stands along the line of route of the procession. Among others desirous of making a little hay out of the brief spell of sunshine they afforded in these latter days of depression were those hospitals fortunate enough to command a view of the proceedings. The postponement of the ceremony has placed these particular institutions in a somewhat awkward position. Their only course has been to offer to return the money paid for seats less 10 or 15 per cent. to meet expenses. In many, if not in most cases, however, the purchasers will doubtless allow the money to remain in the hands of the hospitals. Another point of some importance is the retention or otherwise of the stands. If, on the ground of the costliness of erection they are allowed to remain *in situ*, in the hope that the Coronation will take place in September or October, both the hospitals and the public will be put to a good deal of inconvenience. Moreover, there is an ever present danger of fire in the existence of these large wooden structures built against the walls of the hospitals. In these dog days the wood will become dry as tinder. If they are allowed to remain special precautions should be taken as regards fire not only in the stands themselves but also in the adjacent hospitals.

The Midwives Bill.

THE Bill has passed the Committee stage in the House of Lords, where the provision was agreed to that after January 1st, 1905, the assumption of the title of midwife, or any name implying that certification under the Act, shall be punishable by a fine of £5; and that after January, 1910, no woman shall "habitually and for gain" attend women in labour unless she is certified under the Act. Provision was also made to divide the Register of Midwives into two sections, to distinguish between the qualified and merely registered women. The words rendering it compulsory on the Privy Council to submit rules to the General Medical Council before approving them was modified, and as it stands the Privy Council will only be required to "take into consideration" any representations made by the Medical Council. It was also made the "duty" of the local supervising authority to suspend any nurse when necessary "in order to prevent the spread of infection." An amendment was also agreed to allowing any woman who thinks herself aggrieved by any decision of the Midwives Board to appeal to the High Court within three months of any decision, such appeal to be final. The Bill as amended was then reported to the House.

Arsenic in Medicine.

Of late years the fashion of giving arsenic in medicine has considerably diminished. Even in dermatology, where formerly in many schools arsenic formed a sheet-anchor among remedies, the drug is now comparatively or altogether neglected. That result is not to be wondered at, considering the notoriously damaging effect of the metal upon excretory organs, to say nothing of nervous and other internal structures. The arsenical beer-poisoning epidemic of 1900 and 1901 is likely to set the minds of medical men thinking, as well as those of their patients. If arsenic in the extremely small quantity of two grains to a gallon of beer is sufficient to set up distressing, dangerous and sometimes fatal illness in a consumer, what is likely to be the result of courses of arsenic given in physic, and kept up over long-continued periods of time? In his report recently presented to the Royal Commission on Arsenical Poisoning, Professor Delépine mentioned the following formidable changes as common among the victims of arsenical beer: (1) general hyperæmia, most noticeable in the lungs, glands, muscles, and nerve centres; (2) considerable degeneration and wasting of some of the muscles examined; (3) albuminous and fatty degeneration of the heart muscle; (4) more or less complete disappearance of fat from the cells of fatty tissue; (5) albuminous and fatty degeneration of glandular epithelium, specially well marked in the liver; (6) degeneration of nerve tissues, most marked in the nerve-cells of the cerebral cortex and the spinal cord. On the whole case Professor Delépine concluded that the epidemic of 1900-1901 was due to arsenic in beer, derived from arsenical glucose used as a malt substitute. The presence of smaller quantities of arsenic, such as sometimes arose from badly prepared malt, might be injurious in weakly persons. Bad results were more marked among classes of persons exposed to poor feeding and other deteriorating influences.

Kernig's Sign.

It is now nearly twenty years since Kernig described the phenomenon which has since been referred to as Kernig's Sign. He made no attempt to explain the nature of mechanism by which it is produced, nor did he claim that it was pathognomic of meningitis. It still remains a subject of investigation; notwithstanding that a great number of theories have been formulated to account for its occurrence, none have so far received any very wide amount of support. The number of cases of meningitis of all kinds, including those of epidemic cerebro-spinal, in which the sign has at no time been present, is daily growing larger, as is also the list of cases of disease other than those affecting directly the brain or meninges in which the sign has been present. Dr. Lailer believes that it may occur as a symptom of fæcal encephalitis, and may then be present on the opposite side only of the body Further, that the most reasonable explanation is to ascribe it to an irritative lesion of the pyramida tract that diminishes but does not destroy its functional activity.

Pregnancy and Tuberculosis.

Repeated pregnancy is well known to create a marked predisposition to tuberculous infection, no doubt by reason of the depreciation of vitality which it determines. On this ground Dr. Hamburger, of Berlin, advocates the induction of abortion in pregnant women who are manifestly tuberculous. From a purely scientific point of view the suggestion has much to recommend it in that it is generally recognised that we are justified in sacrificing the life of the unborn child in the major interests of the mother, and, moreover, because the children of tuberculous parents are by heredity often doomed to an ephemeral existence. It may, however, be urged of tuberculous mothers that it is a common experience to see them resist the disease during the child-bearing period only to succumb at or towards the advent of the menopause. It is highly improbable that this principle of treatment will ever be generally adopted, though public opinion is gradually tending to condemn the marriage of tuberculous subjects. No legislative measures can be trusted to grasp the problem involved, and it can only be by educating individuals to a proper conception of their responsibilities and their duties to generations as yet unborn, that we can hope to bring about a reaction against these marriages, so prolific in misery to individuals and degeneracy of the race.

Opium in Childhood.

The fact that opium produces such marked toxic symptoms in childhood has almost banished this most valuable therapeutic agent from the list of drugs used in diseases of childhood. The effect of opium on a healthy child or one suffering from some minor ailment is wholly unlike the effect it produces in such serious complaints as enteritis or cholera infantum. The older writers were in favour of giving the young patient one good dose, and Scotch physicians usually combined the drug with ammonia. Once more the use of opium is recommended in children's diseases by M. J. A. Cueto, whose recommendation is supported by our contemporary *El Siglo Medico*. We hope that the unnerving fear of the drug is passing away and that children will not be deprived of this potent and valuable medicine.

The Pharmacy Act.

An amended Order has been issued by the Privy Council adding "liquid disinfectants" to the list of poisons which, together with "liniments, embrocations and lotions," must be sent out in bottles distinguishable by touch and duly labelled.

Rebuilding of Manchester Royal Infirmary.

After about a quarter of a century's discussion and a twelve years' battle of sites, the Board of Management of the Manchester Royal Infirmary have recommended that a new hospital on "pavilion" lines should be erected on the present site and arranged to provide 452 beds and accommodation for 230 officers, nurses, and servants. The ground is of very limited extent, in a crowded, noisy, dusty, and in many other ways unsuitable part of the city. When hospitals and other institutions for the sick and afflicted in London and other cities are learning the importance of a departure into the country, and are realising the danger of crowding sick together on limited space and in city atmosphere, it seems short-sighted policy for Manchester to expend £200,000 in erecting a new infirmary on an old and unsuitable site, and in the midst of the worst possible climatic conditions.

Lumbar Puncture and the Means of Avoiding its Dangers.

Lumbar puncture, even apart from the injection of drugs into the spinal canal, is an operation by no means devoid of risk. Experience has shown, in too many instances, that the simple withdrawal of a small quantity of cerebro-spinal fluid is capable of causing, and indeed almost invariably determines, more or less troublesome symptoms. The operation may give rise to vertigo, faintness, and apoplectiform attacks, &c., symptoms directly due to a disturbance of intra-cerebral pressure, and the withdrawal of fluid is often followed by obstinate headache, vomiting and acceleration of the pulse. Dr. Milian, of Paris, points out that these more or less distressing consequences may be avoided by certain simple precautions. First of all, it is important to allow the fluid to escape spontaneously, no aspiration being employed. The quantity withdrawn ought never to exceed one or two cubic centimetres, and the flow should be arrested directly the patient evinces the slightest manifestation of discomfort. The patient moreover should be kept in the horizontal position for several hours after the operation, while in presence of any disquieting symptoms the head must be placed low and ether or caffeine injected. He claims that by these means all risk of dangerous complications may practically be averted, and as the operation is one which seems likely to be frequently resorted to for diagnostic purposes his suggestions are worthy of note.

Cardiac Paralysis under Chloroform.

In a number of cases in which death has taken place suddenly in persons under chloroform the only abnormalities discovered at the post-mortem examination have been enlargement of the thymus, with or without a concomitant enlargement of the spleen. This condition, which is often associated with hypertrophy of the follicular glands at the root of the tongue, has also been met with in several cases of death under ether as well as in cases of sudden death from trivial causes (cold bath, the introduction of a tongue depresser, &c.) apart from the administration of any anæsthetic. There seems to be reason to suspect a relationship between this anatomical abnormality and cardiac paralysis of sudden advent, but our ignorance of the function of the thymus renders it difficult to establish this relationship on other than a purely clinical basis. Even as matters stand it may be regarded as proved that in subjects of enlarged thymus the use of a general anæsthetic should, whenever possible, be avoided, but, as it is practically impossible to ascertain beforehand that this gland is enlarged, we are fain to fall back on the presence of hypertrophied follicles at the base of the tongue and enlargement of the spleen as constituting contra-indications for the administration of an anæsthetic.

The Quackery of Rheumatism.

A sufferer from chronic rheumatism, to whom east winds and wet weather brought nothing but torture, has been giving some journalists an account of the many disappointments he suffered when trusting vaunted remedies. His list includes the names of 1,437 remedies, one and all of which he fairly tested during his life of torture. Many of them still make a noise in the public ear. For years he wrapped himself in red flannel; to this he added wearing flowers of sulphur in his stockings; as an additional precaution he carried a few cut potatoes in his pockets and afterwards supplanted them with a slice of raw onion. Early in the morning he drank a pint of good ale to which a rusty nail had been added at bedtime. For this rather agreeable medicine he substituted successively Glauber salts, in hot water, Epsom salts, and a long series of natural, purgative, and other medicinal waters. He then took to wearing a hare's foot round his neck and commenced a systematic course of patent and proprietary pills. We will not, however, inflict an enumeration of the many varieties of medication this victim of rheumatism tried; we will merely add that he is still a sufferer and still seeks relief from every advertised nostrum.

The Council Election of the Royal College of Surgeons of England.

The election of four members of the Council of the Royal College of Surgeons of England took place on the 3rd inst., with the result that the following gentlemen were elected:—Mr. Howard Marsh, Mr. J. H. Morgan, Mr. H. H. Clutton and Mr. C. W. Mansell Moulin. The unsuccessful candidates, in numerical order, were Mr. Jordan Lloyd, Mr. J. Bland Sutton, Sir W. H. Bennett and Mr. Clinton T. Dent.

The International Congress on the Welfare and Protection of Children will be held in the Guildhall, London, on Tuesday, July 15th, and three following days, under the presidency of Earl Beauchamp. The medical section will be presided over by Sir James Crichton Browne, F.R.S., M.D., who is expected to deal with the question of "Tuberculosis" in his opening address.

The annual meeting of the North-East London Clinical Society was held on Thursday, July 3rd, at the Tottenham Hospital, and afterwards a garden party took place in the extensive and beautiful grounds of the hospital.

The last meeting of the British Child Study Association took place on June 24th, at Normansfield, Hampton Wick, where members and visitors were the guests of Dr. and Mrs. Percival Langdon-Down.

The annual meeting and dinner of the Brussels Medical Graduates' Association will be held in London on Tuesday next, July 15th, at 7.30 p.m., at the Trocadero Restaurant.

The authorities of St. Thomas's Hospital are to be congratulated on their windfall of over a quarter of a million, which comes to them under the will of the late Mr. Charles Gassiot.

The Queen will open the Imperial Coronation Bazaar in aid of the Children's Hospital, Great Ormond Street, Bloomsbury, at the Botanical Gardens on Thursday, July 10th.

PERSONAL.

Dr. P. Murison has been appointed Medical Officer of Health for Durban.

Mr. Richard W. Lloyd has been elected president of the West London Medico-Chirurgical Society, vice Sir Alfred Cooper, whose term of office has expired.

Mr. Shaw McLaren, Assistant Surgeon to the Royal Infirmary, Edinburgh, has resigned his post, and is about to take up medical missionary work in India.

A portrait of the late Dr. D. J. Leech, Professor of Materia Medica and Pharmacology in the Victoria University, Manchester, has been presented to the Manchester Royal Infirmary.

The Duke of Devonshire, President of the Board of Education, will preside at the opening of the Nature Study Exhibition, Royal Botanic Gardens, Regent's Park, by the Duchess of Devonshire, at 3 p.m., on Wednesday, July 23rd.

Sir Henry F. Norbury, M.D., K.C.B., Director-General of the Medical Department of the Royal Navy, will preside at the distribution of prizes to the successful students of St. Thomas's Hospital to-morrow (Thursday) at 3 p.m. Sir Henry, we may recall, has just been appointed Honorary Surgeon to the King.

Dr. Malcolm M. Sinclair, resident medical superintendent of the Cotswold Sanatorium, Gloucestershire, has been appointed medical superintendent of a large new sanatorium being built at the Blue Mountains, near Sydney, New South Wales. Candidates for this important appointment hailed from Australia, United States, and Germany, as well as from the United Kingdom.

A Medical Libel Action.

Dr. W. H. Bathurst, of Walthamstow, has accepted £50 and costs in settlement of a claim for damages for libel, uttered by a fellow member of the Walthamstow District Council, imputing improper conduct to him.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

CHLOROFORM AS A NARCOTIC.

To the Editor of The Medical Press and Circular.

Sir,—I have often read of persons inhaling chloroform in order to combat insomnia, and the point has often been raised whether it be possible to induce unconsciousness by means of chloroform in persons actually asleep. Under these circumstances it occurs to me that a little experiment of my own may not be without interest. I was suffering recently from a particularly exasperating form of sleeplessness and, as the night was too far advanced to take any of the usual hypnotics, I fetched the chloroform and tried to send myself to sleep, taking all necessary precautions to avoid an overdose. It, of course, produced a sensation of calm after the initial disagreeable feeling of impending asphyxia, but nothing at all akin to genuine sleep, and when the effects had passed off I was as wakeful as before. I repeated the experiment several times, but always with the same result. I infer that unless the quantity of chloroform inhaled be such as to determine a certain degree of permanent stupor it is in no sense a hypnotic.

Incidentally I made the comparison between inhaling a few drops—about half a drachm—of chloroform from a mask and inhaling the drug from a Junker's inhaler (Krohne's modification). With the mask the first few inspirations were oppressively pungent and asphyxiating, and throughout the effect on the respiratory tract was distinctly disagreeable. With the inhaler, on the other hand, no effect of the kind was produced, and no discomfort of any kind resulted. I noted, too, that the amount of chloroform required to produce unconsciousness was less than a fourth part of that used on the mask, a fact which no doubt explains the difference in the nature of the resulting impression.

Quite apart from the greater safety claimed for anæsthesia induced by a regulating inhaler, my own sensations have satisfied me that it is "cruelty to animals" to use the mask with its attendant drawbacks, when it is possible to obtain positively satisfactory results with the inhaler, and I am more surprised than before that the manipulation of an inhaler does not form part of the routine instruction given to students at the medical schools in the matter of the administration of anæsthetics.

I am, Sir, yours truly,
Practitioner.

Obituary.

ALEXANDER MARSDEN, M.D.St.And., F.R.C.S.Ed.

The death is announced of Dr. Alexander Marsden, Chairman of the General Committee of the Cancer Hospital, Brompton Road. Dr. Marsden, whose career was long and active, was originally in the Army Medical Service, in which capacity he served at the General Hospital, Scutari, with Miss Nightingale, and subsequently at the siege of Sebastopol. He early took an interest in the treatment of cancer, and founded the Cancer Hospital, in Brompton Road, with which, as surgeon and chairman of committee, he has ever since been connected. He also assisted in founding the Royal Free Hospital, in Gray's Inn Road, of which he was trustee. Dr. Marsden was the author of numerous contributions and works on cancer, which embodied the varying views from time to time obtained in reference to its nature and treatment, but for the last quarter of a century he limited himself to administrative work.

A Remarkable Baby.

This is the season for big gooseberries—and big babies. The last to hand is the birth of a sixteen pound baby, and one can only regret that "it" was born as far away as St. Louis, Missouri.

Literature.

LIMBECK ON THE CLINICAL PATHOLOGY OF THE BLOOD. (*a*)

Professor von Limbeck's work on the clinical pathology of the blood first appeared about ten years ago, and the second edition, which has been translated into English by Drs. Latham and Nachbar, is now published by the New Sydenham Society.

It is mainly an epitome of the more important observations that have been made by others, with the addition, in most cases, of the author's experiences on the different points discussed.

The methods of investigation described are very numerous. Five methods are given for determining the volume of the blood, but not one of them has the smallest claim to be considered accurate. Six hæmocytometers are described, as are eight instruments for hæmoglobin estimation. Of the latter instruments, the author considers the hæmoglobinometers of Gowers and Fleischl are preferable, as being simpler as well as more free from error. A brief description is given of the methods of investigating the histological characters of the blood as well as its physical and chemical characters The morphology of the blood is dealt with sufficiently fully, and a short account of the parasities of the blood (chiefly those of the malarial fevers) is given.

The last chapter is devoted to the results of clinical investigations of the changes in the blood in the primary and secondary anæmias, leukæmia, and in other pathological conditions, while there is a short appendix on the anæmias of childhood. The book furnishes as far as its size permits a good account of the work that has been done in hæmatology. It would have been rendered more useful, however, by the addition of a few illustrations of the histology of normal and abnormal bloods.

There is an extremely full and valuable bibliography, and a good index. The work of the translators is to be commended.

Medical News.

FOURTEENTH INTERNATIONAL CONGRESS OF MEDICINE.

The programme for the XIVth International Congress of Medicine to be held in Madrid, Spain, in April, 1903, is already published. The following is a translation of the principal regulations:—

1. The Congress will be under the patronage of his Majesty the King, Don Alphonso XIII., and of the Queen Mother, during its sitting, from April 23rd to 30th, 1903.

2. The Congress will consist of members of the medical profession, dentists, veterinarians and pharmaciens, who having complied with the usual regulations are free to take part in all the meetings, either by reading a paper or by oral comments.

3. Members are also entitled to a copy of the "Proceedings," and can obtain extra copies at a fixed price. Subscriptions for extra copies will be received by the general secretary at the close of the Congress.

4. The papers read shall remain with the secretaries of the sections for publication.

The Congress shall be composed of the following sections:—(*a*) Anatomy: Anthropology, comparative anatomy, embryology, anatomy descriptive, histology, serathology. (*b*) Physiology: Physical and chemical. (*c*) Pathology: Pathological anatomy, bacteriology. (*d*) Therapeutics: Therapeutics, hydrology, pharmacy. (*e*) Pathology internal. (*f*) Neuropathy: Mental maladies, cranial anthropology. (*g*) Pediatrics. (*h*) Dermatology and syphilography. (*i*) Surgery: Surgery and operative surgery, urinology. (*j*) Ophthalmology. (*k*) Oto-rhino laryngology: Otology, rhino-laryngology. (*l*) Odontology and otomatology. (*m*) Obstetrics and gynæcology. (*n*) Medicine and hygiene, military and naval. (*o*) Hygiene, epidemiology, and sanitary science. (*p*) Legal medicine and toxicology.

6. Members should notify the section they wish to attend on registering their name with the secretary.

7. A committee, consisting of the president, general secretary, treasurer, and some others, shall regulate the course of business of the Congress. The opening and closing meetings shall be general, and only those invited to address the meeting are expected to do so.

8. At the opening meeting the general secretary shall state the arrangements made, the President will deliver his inaugural address, and the honorary presidents will be appointed.

9. Committees of sections are expected to arrange their papers and so forth, and appoint suitable abstract writers for each language, to facilitate discussion.

10. The reading of a paper is not to exceed fifteen minutes, and in discussion no speaker is to exceed five minutes. The reply of an author to criticism is confined to ten minutes.

12. The titles of all communications are to be with the Secretary-General by January 1st, 1903, together with the conclusions he arrives at, and a short abstract of his paper, which latter will be printed and distributed to the members of the section in which it is to be read.

12. The official languages of the Congress are Spanish, French, English, German and Italian. Ladies, who are relatives of the members, and who accompany them, will have a special reduction in their train fares and obtain a ticket for the Congress meetings for twelve pesetas each.

Society for the Study of Diseases in Children.

This Society held their provincial meeting at Manchester on Saturday, June 21st. Cases were demonstrated in the wards of the Children's Hospital, Pendlebury, by the honorary medical staff prior to the meeting which took place at four o'clock, and which was well attended. Dr. Henry Ashby was in the chair, and at its conclusion a hearty vote of thanks was proposed to the chairman and the hospital authorities. Many London representatives and provincial members were present. A report of proceedings will be found in another column. Subsequently dinner was served at the Queen's Hotel, Manchester, Dr. A. E. Sansom presiding, which was well patronised and passed off successfully. The following day the members and their friends enjoyed a trip into Derbyshire. After a country drive from Grindelford, luncheon awaited the party at the "Peacock," Baslow, where they also partook of tea after a visit to Chatsworth, and they were subsequently driven to Bakewell Station in time for the evening train for London, and for that for Manchester and Liverpool. The provincial meeting next year will take place at Brighton. The annual general meeting will be held at the Hotel Cecil at 6.30 p.m. on Wednesday, July 16th, and will be followed by dinner at 7.30 p.m., at which guests will be welcomed. Dr. Henry Ashby will be in the chair.

A Valuable Find.

A specimen of the mammoth has recently been found near the River Ebrosowka, in Eastern Siberia, by Dr. Hertz. The body has been found in a good state of preservation, embedded in ice. The hair is of a reddish-brown colour. Undigested food was found in the stomach of the animal, and on its tongue was the herbage which it ate on the day of its death. The specimen is almost as perfect as the notable 1846 one, which was so marvellously preserved that the stomach still showed young shoots of fir and pine. It differs from other finds in that it occupied a peculiar reclining position with its legs bent under its body, and was not in the upright position like those which were buried by sinking into the tundra marsh.

Royal College of Surgeons of England.

The Council of the College give notice that they will proceed on the 31st inst. to elect an Examiner in Surgery in the vacancy caused by the expiration of the period of office held by Mr. C. H. Golding-Bird, F.R.C.S

(*a*) "The Clinical Pathology of the Blood." By Dr. Rud. R. v. Limbeck. Translated from Second German Edition. London: The New Sydenham Society. Mr. K. H. Lewis, Agent.

who is, however, a candidate for re-election. At the same meeting an Examiner in Dental Surgery will also be elected in the vacancy caused by the resignation of Mr. Morton Smale. Applications must be lodged with the Secretary before the 23rd inst.

Dublin University-Conferring Degrees.

THE following degrees were confered on July 1st:—

In Absentia.

Licentiatus in Medicina, in Chirurgia, et in Arte Obstetricia.—Georgius Ricardus Harman.

Baccalaurei in Medicina.—Guilelmus Hall Peile, Guilelmus Taylor, Herbertus Leslie Thurnell.

Baccalaurei in Medicina, in Chirurgia, et in Arte Obstetricia.—Robertus Pounden Beatty, Carolus Molyneux Benson, Wallace Benson, Ernestus Brabazon Booth, Guilelmus Joseph Butler Bourke, Guilelmus Ashley Graves Cluffe, Joseph Ricardus Garratt, Harry Ffrench Johns, Johannes Swift Joly (B.Ch. Stip. Cond.), Herbertus Guilelmus Jones, Georgius Henricus Keene, Robertus Houston MacNicol, Guilelmus Franciscus Alexander Moyers, Rev. Franciscus Mullen, Jacobus Crossle Scott, Ricardus Franciscus Steele, Robertus Georgius Hetherington Tate, Johannes Archibaldus Valentine, Carolus Waltham Webb, Johannes Stevenson Wilson, Herbert Francis Perkins.

Doctores in Medicina.—Carolus Arturus Kinahan Ball, Guilelmus Joseph Butler Bourke, Guilelmus Ashley Graves Cluffe, St. George Eyre Harris, Franciscus Jacobus Strong Heaney, Harry Ffrench Johns, Johannes Swift Joly, Guilelmus Grierson Joynt, Jacobus Milne, Guilelmus Franciscus Alexander Moyers, Thomas Guilelmus Moorhead (stip. cond), Ricardus Guilelmus Mullock, Johannes Joseph Power, Carolus Vivian Beresford Stanley, Guilelmus Clegg Stevenson, Herbertus Leslie Thurnell, Johannes Archibaldus Valentine.

In Absentia.—Baccalaureus in Medicina et in Chirurgia.—Eduardus Cuthbert Nangle (Autea Liceat.)

St. Thomas's Hospital, Medical School.

SIR HY. F. NORBURY, M.D., K.C.B., Director-General of the Royal Navy Medical Department, will distribute the prizes at this school to-morrow (Thursday). Among the principal prize-winners for the winter session, 1901-2, are the following:—

H. B. Whitehouse, of Birmingham, Entrance Science Scholarship, £150.

G. R. Footner, of Romsey, University Scholarship, £50.

First Year Students.—H. B. Whitehouse, of Birmingham, the Wm. Tite Scholarship, £27 10s.; R. F. Hebbert, of Guildford, College Prize, £20; W. R. Bristow, of Bexley Heath, College Prize, £10.

Second Year's Students.—L. E. C. Norbury, of Ealing, the Peacock Scholarship, £38 10s.; G. J. Langley, of East Dulwich, College Prize, £20; A. W. Hooker, of Putney, College Prize, £10.

Third Year's Students.—H. A. Kisch, of Maida Vale, Second Tenure of Musgrove Scholarship.

Fifth Year's Students.—C. U. Ind, of Margate, College Prize, £10 (Medicine); W. H. Harwood-Yarred, of Brixton, College Prize, £10 (Surgery); G. D. Franklin, of Leicester, College Prize, £10 (Midwifery); G. D. Franklin, of Leicester, Hadden Prize, £10 (Pathology); W. H. Harwood-Yarred, of Brixton, College Prize, £10 (Pharmacology); A. D. Hamilton, of Chester, College Prize, £10 (Forensic Medicine and Insanity); W. H. Harwood-Yarrow, of Brixton, College Prize, £10 (Public Health).

The following are the recipients of medals:—Practical Medicine: G. D. Franklin, of Leicester, the Mead Medal; H. O. Butler, of Shanghai, and C. H. Sedgwick, of Grove Park (equal), the Wainwright Prize. Surgery and Surgical Anatomy: W. H. Harwood-Yarred, of Brixton, the Cheselden Medal. Pathology and Morbid Anatomy: W. M. G. Glanville, of Bristol, the Bristowe Medal. For General Proficiency and Good Conduct: W. H. Harwood-Yarred, of Brixton, the Treasurer's Gold Medal.

Rontgen Society.

AT the annual meeting held on Thursday last, July 3rd, Mr. Herbert Jackson, F.C.S., was elected President.

The following were chosen as Vice-Presidents:—The Right Hon. Lord Blythswood, J.P., D.L., LL.D., F.R.A.S.; the Right Hon. the Earl of Crawford, K.T., F.R.S.; J. Mackenzie Davidson, M.B.; D. Ferrier, M.D., F.R.S.; J. H. Gladstone, D.Sc., F.R.S., F.C.S.; Dawson Turner, M.D., of Edinburgh.

Council: G. B. Batten, M.D., C.M., Barry Blacker, M.D., B.S., Wm. Chattaway, J. H. Gardiner, F.C.S., A. W. Isenthal, F.R.P.S., Rev. P. Mulholland, B.A., E. Payne, M.A., C. E. S. Phillips, G. H. Rodman, M.D., E. W. H. Shenton, L.R.C.P., M.R.C.S. (Librarian and Curator), H. Snowden Ward, F.R.P.S., J. Wimshurst, F.R.S.

Hon. Treasurer: J. J. Vezey, F.R.M.S.

Hon. Secretary: F. Harrison Low, M.B.

Death under Chloroform.

A MAN, age 55, died at the Salisbury Infirmary last week after inhaling 120 minims of chloroform, given preparatory to the wiring of a fractured humerus. Death was attributed to paralysis of the centre of respiration, and nothing was found post-mortem to explain his susceptibility to the drug.

Robes for Pharmacists.

IT is reported that at the recent congress of Austrian pharmacists in Vienna it was decided to adopt a long robe as the professional garb, the robe to be worn during business hours by chemists and their assistants. It will also serve as a *robe de chambre* and as a *peignoir*, and in winter nights to supplement any shortcomings in the bed clothes—all this in addition to "raising the prestige of the pharmaceutical profession."

A Doubtful Pox.

MR. D. G. KENNEDY, of Bermondsey, was summoned last week for failing to notify a case of chicken-pox. It transpired that he had filled in the certificate—"pox"—intending no doubt to convey the idea that he was not sure which, whether it was chicken or small-pox and from this attitude he declined to depart, hence the proceedings. In the upshot, Mr. Kennedy undertook to fill up the forms in future to the best of his judgment and thereupon the case was dismissed. Of course, this is very funny, but we question the propriety of causing all this trouble when it is so easy to be humorous, and to show it in simpler fashion.

The Oxygen Hospital.

THE sixth annual report of the Oxygen Hospital testifies to its continued and unimpaired vitality. It is not suggested that the results are to be measured by numbers, since these are necessarily small, but rather by what may be termed case-success. Of ninety-six cases seventy have been discharged—we trust in good health, though this is not explicitly stated. The results of the application of oxygen in lupus, after scraping, certainly seem to have been very encouraging, a large proportion having remained free from recurrence for several years. The ozone treatment of middle-ear deafness is claimed to have been uniformly successful, but in the absence of more precise data we must reserve our opinion. The "cubicle" treatment of consumption by inhalation of air fortified by admixture with oxygen is said to have produced "remarkable" results, but here again the data are insufficient to justify a definite opinion. In any event the experiments and observations which are under way at the hospital are very interesting and may conceivably result in establishing the exact therapeutical position of oxygen.

An Epileptic Colony.

A GARDEN party will be given at the Epileptic Colony at Chalfont St. Peter, Bucks, to-day (Wednesday), when visitors will be afforded an opportunity of seeing the colonists engaged in their work upon the farm, in the workshops, and in the laundry.

The Medical Intercession Service.

A SERVICE of intercession for the King was organised by the Guild of St. Luke, and took place at St. Paul's Cathedral on Wednesday last, when upwards of 400 medical men attended, most of them wearing their university robes. At the conclusion of the service the following message was dispatched to the Queen· "The

Guild of St. Luke, associated with many members of the medical profession, having assembled in St. Paul's Cathedral this evening to offer an intercessory service to Almighty God on behalf of his Majesty the King in his sickness, beg leave to present their humble duty to your Majesty and to express their fervent wishes for his Majesty's speedy and complete recovery."

Small-pox in London.

The epidemic of small-pox in the Metropolis is steadily declining, the number of admissions on one day having fallen to three. The number of patients still under treatment in the hospitals of the Metropolitan Asylums Board has fallen to 722. It is pointed out that the public should bear in mind the fact that this decline is only seasonal, and affords no protection against a recrudescence as soon as colder weather supervenes.

West London Medico-Chirurgical Society.

At the annual meeting of this Society, held on Friday last, July 4th, the following officers and members of Council for 1902-3 were elected:—President—Mr. R. W. Lloyd (*a*). Vice-Presidents—Mr. W. McAdam Eccles, Mr. Horace Walker, Dr. S. A. Bontor, Mr. F. Savery, Mr. G. E. Twynam (*a*), Mr. H. W. Chambers (*a*), Mr. W. P. Mallam (*a*), Dr. W. T. Gardner (*a*). Council—Mr. T. R. Atkinson, Dr. A. Baldock, Mr. L. A. Bidwell, Dr. E. F. Potter, Dr. G. P. Shuter, Dr. Seymour Taylor, Mr. R. Pollock (*a*), Dr. Leonard Dobson (*a*), Dr. A. M. Ross Sinclair (*a*), Dr. A. Whitfield (*a*), Mr. G. A. Simpson (*a*), Mr. J. G. Pardoe (*a*). Treasurer—Mr. T. Gunton Alderton. Secretaries—Dr. E. A. Saunders, Dr. C. Buttar (*a*). Librarian—Mr. C. B. Keetley. Editor of Journal—Mr. H. Percy Dunn. Editorial Secretary of Journal—Mr. W. McAdam Eccles. (*a*) Did not hold similar office last year.

Royal College of Surgeons in Ireland.

The following candidates have passed the primary part of the Fellowship Examination:—G. P. A. Bracken, J. J. Conolly, A. N. Crawford, C. A. Cusack, R. W. D. Leslie, T. C. C. Leslie, W. F. B. Loughnan, J. C. Murphy, I. Pratt, and I. S. Sheild.

Dublin Sanitary Association.

At a meeting of the Dublin Sanitary Association held last week, it was pointed out that while the death-rate in the city continues low, there is at present a widespread and increasing epidemic of measles in the Dublin registration area. 191 cases of this disease were notified in the city during the week ending June 28th, while twenty-six cases were notified in the Pembroke Urban District during the same period. The Council note with regret that no information as to the prevalence of measles in the Rathmines Urban District is furnished in the Registrar-General's returns, the disease not being notifiable in the Rathmines district. The following resolution was passed unanimously:—"Resolved—To call the attention of the Urban Sanitary authority of Rathmines to the necessity of adding measles to the list of infectious diseases notifiable in that district, owing to the existence of a widespread and rapidly increasing epidemic of that disease in the Dublin registration area."

Vaccination in Dockyards.

An Admiralty Order issued at Chatham Dockyard directs that] for the future men entered in the yard shall be taken on conditionally on their being revaccinated, unless they can prove that they have recently been vaccinated.

Munificent Legacy to St. Thomas's Hospital.

The late Mr. Charles Gassiot has bequeathed the residue of his estate to be held in trust for St. Thomas's Hospital, and it is estimated that this will amount to about a quarter of a million sterling.

Pass Lists.

Royal College of Surgeons, Edinburgh.—The Fellowship.

At a meeting of the College, held July 2nd, the following gentlemen, having passed the necessary examinations, were admitted Fellows of the College:—John Broadley, M.B.; Charles John Caddick, M.B., C.M.; David Robertson Dobie, M.D.; Robert Edwin Goone-Tilleke, L.R.C.S.E.; Henry McIlree W. Gray, M.B., C.M.; Abraham Haynes, L.R.C.S.E.; Guy Bertram Hollings, M.D., M.R.C.S.Eng.; Albert Henry B. Kirkman, M.R.C.S.Eng.; Francis Lionel Provis, M.R.C.S. Eng.; Matthew Carrington Sykes, M.R.C.S.Eng.; and Gangakanta Nag, L.R.C.S.E.

Society of Apothecaries of London.

The following candidates passed in the Primary Examination (Part I.) on July 2nd and 3rd, 1902:—

Biology.—L. W. Bradshaw.

Chemistry.—F. M. Cunningham, C. A. Mortlock-Brown, C. E. Pring.

Materia Medica and Pharmacy.—H. F. Briggs, J. M. Burke, W. H. A. Elliott, A. R. McEnnery.

The following candidates passed the Preliminary Examination (Part II.)—

Anatomy.—H. H. R. Bayley, E. H. G. Duncan, W. H. A. Elliott, W. F. H. Ives, G. B. Messenger, N. H. Oliver, E. D. Richardson, G. Rollason, C. A. Sampson, I. T. Walker.

Physiology.—H. H. R. Bayley, E. H. G. Duncan, W. H. A. Elliott, A. G. Gamble, G. Heathcote, W. S. Hughes, W. F. H. Ives, H. M. Langdale, E. Moir, N. H. Oliver, E. D. Richardson, G. Rollason, C. A. Sampson, I. T. Walker, R. M. Wingent.

University of Dublin (Trinity College).

Previous Medical Examination.

The following candidates passed the Examination in Anatomy and Institutes of Medicine during Trinity Term. Names arranged in order of merit:—William J. Powell, Montgomery Du B. Ferguson, George Mac G. Millar, John A. Pringle, Howard English, Wilfrid T. Thunder, Benjamin Johnson; Henry E. M'Cready and George E. Nesbitt (equal), Thomas Creaser, Carlile Kelly, Joseph E. Houstin, Charles R. Coppinger, Robert Magill, Vincent Mayne, Francis J. S. Crean, Charles R. Morris; John W. Burns and Thomas Wilson (equal); Cecil Boyd, Geoffrey Friel, and William Hassard (equal).

Physics and Chemistry.—Frank R. Seymour, Francis R. Coppinger; Edward O. Marks and John D. Sands (equal), Thomas J. Cobbe, Ralph S. Oldham; Theodore C. Somerville, John W. Tomb, and Henry D. Woodroffe (equal), Samuel G. S. Haughton, Gustav W. Thompson, Richard Connell, Cecil Conyngham; John C. P. Beatty and Henry J. Keane (equal); Reginald Holmes and Robert B. Jackson (equal); James E. Mac Farlane and George E. G. Vickery (equal), Basil Brooke, George B. M'Caul, Thomas L. de Courcey, Edward Gibbon, Howard S. Millar; Henry D. Drennan and Thomas H. Peyton (equal), Ernest C. Phelan.

Botany and Zoology.—Walter G. M. Anderson, Edward C. Stoney; Thomas J. Cobbe and Robert E. Wright (equal); Alfred G. Alexander and Charles T. Atkinson (equal); Francis A. Coppinger, Alexander L. Otway, Crosbie Maurice B. Talbot; John C. P. Beatty and Rev. Thomas Brook (equal), John W. Tomb, Thomas H. Peyton, George E. G. Vickery and Reginald Holmes (equal); Edwin B. Bate and Harry Ff. Johns (equal); William Nicholson and Dudley F. Torrens (equal); Thomas M. Crawford and Charles G. Sherlock (equal).

The following passed the Final Examination (Section B):—Thomas H. Gibbon; William R. P. M'Neight and Seaton S. Pringle (equal); Alexander H. Marks and John H. Torney (equal), Robert J. Fleming; Anthony H. Corley and Reginald H. Lee (equal), Thomas W. Crowley, Charles A. Stone, David C. Pearson, Maurice FitzGibbon.

Surgical Travelling Prize.—Charles A. K. Ball.

Special Prize.—Richard A. Stoney.

Medical Scholarships.

In Anatomy and Institutes of Medicine.—James G. Wallis (Trinity College Scholarship), John Cunningham (Stewart Scholarship).

In Physics, Chemistry, Botany and Zoology.—Francis O. B. Ellison.

Purser Medal in Institutes of Medicine.—William J. Powell.

Diploma in Public Health, Part I.—Francis W. Lamb.

Notices to Correspondents, Short Letters, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature or nitials*, and avoid the practice of signing themselves "Reader," Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

Dr. S. V.—Very possibly there exists some error of refraction to account for the "eye strain," especially as local treatment has failed to relieve. You should have this attended to.

Mr. J. Hunns (Wood Green).—Your communication was received as we were "at Press."

A GIGANTIC SOCIETY.

On the established principle that "all great things from small do grow," we have now before us the Fifty-first Annual Report of "The Birkbeck," which is probably the most colossal institution of its kind in the world. Fifty years ago its annual receipts were £25,000; last year they were 90 millions sterling, and during its fifty years' existence nearly 309 millions have passed into its coffers. It began as a small building society, and is now, by judicious management, the largest of its class, and a bank in the first rank as well. We are glad to know that many medical men are among its members, and we congratulate them on their good fortune.

G. S. A.—You could hardly do otherwise than return the cheque. There may be nothing illegal or "illicit" in the transaction, but it would be in the last degree objectionable.

Electro.—(1) If you will let us have a precise statement of the facts of the case we will see what can be done. (2) If you wish an analysis made it must be at your own expense.

HOW TO ACQUIRE A GOOD FIGURE!

According to a lady's journal the best means of acquiring a good figure is "To eat black grapes, drink cocoa, not tea, and take cod-liver oil daily." Simplicity is bliss!

Westland B.—The matter having gone so far, the advice of a trustworthy solicitor should be sought.

Dr. G. B. (Bristol).—Chinosol of the strength of 1 in 4,000 is the best antiseptic for use in ocular surgery.

Editor of the "Baker."—See reply to Mr. Hunns.

Dr. C. S.—The Coronation Honours were dealt with fully in our last; the other matter also has now passed beyond necessity of record.

Meetings of the Societies, &c.

LONDON.

Wednesday, July 9th.

Dermatological Society of London (11, Chandos Street, Cavendish Square, W.).—5.15 p.m. Demonstration of Cases of Interest.

Thursday, July 10th.

British Gynæcological Society (20, Hanover, Square, W.).—8 p.m. Specimens will be shown by Mr. Jessett, Dr. Hodgson, Dr. Purcell, and others. Papers: Mr. B. Jessett and Dr. H. Hodgson.

Friday, July 11th.

British Laryngological, Rhinological, and Otological Association (11, Chandos Street, Cavendish Square, W.).—4 p.m. Dr. Macintyre, President. Cases and specimens will be shown and papers read by Mr. Lennox Browne, Dr. Wyatt Wingrave, Dr. Abercrombie, and others.

Tuesday, July 15th.

Society for the Study of Inebriety.—The Quarterly Meeting will be held at the London Temperance Hospital, Hampstead Road, at 4 p.m. Dr. Robert Jones will read a paper on "Mental Dissolution, the Result of Alcohol." Visitors are earnestly invited to be present, and to join in the discussion.

Appointmen

Blamey, J., M.R.C.S.Eng., L.S.A., Medical Officer of Perranwell.

Collier, James, M.D., M.R.C.P.Lond., Assistant Physician to the National Hospital, Queen Square, W.C.

Elliott, G. C., M.B., C.M.Edin., House Surgeon to the Staffordshire General Infirmary.

Hawthorne, C. O., M.D.Glasg., M.R.C.P.Lond., Lecturer on Forensic Medicine in the London School of Medicine for Women.

Horton, Thomas, M.D., B.S.Durh., L.R.C.P.Lond., M.R.C.S., Honorary Surgeon to the Torbay Hospital, Torquay.

Jeffeeriss, Iain, M.R.C.S.Eng., L.R.C.P.Lond., First Assistant Medical Officer to the Hendon Sick Asylum.

King, John, M.R.C.S., L.R.C.P.Ed., J.P., Medical Officer of Health for Stratton and Bude (Cornwall).

Lister, Thos. D., M.D., M.R.C.P.Lond., Assistant Physician to the Mount Vernon Hospital for Consumption and Diseases of the Chest, Hampstead and Northwood.

Male, Herbert C., M.D.Edin., Honorary Medical Officer to the Croydon General Hospital.

O'Brien, M. J., L.R.C.P., L.R C.S.I., Certifying Surgeon under the Factory Act for the Mountmellick District of Queen's County.

Phillips, Mary E., M.B.Lond., Second Assistant Medical Officer at the London Sick Asylum at Hendon.

Stock, W. S. V., M.B., B.S.Lond., Resident Medical Officer to the Royal Infirmary, Manchester.

Thyne, Thomas, M.D.Edin.. Medical Officer for the Mill Corner and Cockfosters District of Enfield Parish.

Wright, Hugh P., M.B., Ch.B.Glasg., House Surgeon to Teignmouth Hospital, South Devon.

Vacancies.

Birkenhead Union.—Resident Assistant Medical Officer. Salary £120 per annum, with board, washing, and apartments. Applications to John Carter, Clerk to the Guardians, Clerk's Offices, 45, Hamilton Square, Birkenhead.

Borough Asylum, Portsmouth.—Wanted at once Assistant Medical Officer. Salary £140 per annum, with board, lodging, &c. Applications to the Medical Superintendent.

Brighton, Hove, and Preston Dispensary.—Two House Surgeons. Salary £160 per annum, with coals, gas, apartments, washing, and attendance. Applications to the Assistant Secretary, 113, Queen's Road, Brighton.

Bristol Royal Hospital for Sick Children and Women.—House Surgeon. Salary £120 per annum, with rooms and attendance. Applications to the Secretary.

Burnley Union.—Resident Assistant Medical Officer for their Workhouse, Burnley. Salary £120 per annum, with furnished apartments, rations, washing, and attendance. Applications to J. S. Horn, Clerk to the Guardians, Union Offices, Burnley.

Chichester Infirmary.—House Surgeon. Salary £100 per annum, with board, lodging, and washing. Applications to A. J. Marshall, Secretary.

City Hospital for Infectious Diseases, Newcastle-upon-Tyne.—Resident Medical Officer. Salary £100 per annum, with board, lodging, &c. Applications to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne.

East London Hospital for Children and Dispensary for Women, Glamis Road, Shadwell, E.—Medical Officer for the Casualty Department. Salary £100 per annum. Luncheon is provided at the hospital. Applications to Thomas Hayes, Secretary.

Lanark County Council.—Assistant Medical Officer of Health. Salary £140 per annum, with travelling expenses. Applications to the County Medical Officer, Hamilton, N.B.

Manchester Children's Hospital, Pendlebury.—Medical Officer. Salary £180 per annum. Applications immediately to the Secretary, Children's Dispensary, Garside Street, Manchester.

Mercer's Hospital, Dublin.—Resident Medical Officer. Immediate application to John Robinson, Registrar (see advt.).

Newport and Monmouthshire Hospital.—House Surgeon. Salary £100 per annum, with board and residence. Applications to the Secretary.

New Ross Union.—Medical Officer. Salary £100 per annum, together with usual Vaccination Fees, also £15 per annum as Medical Officer of Health. Immediate application to P. A. Pope, Clerk of the Union (see advt.).

Nottingham General Dispensary.—Senior Resident Surgeon. Salary £200 per annum. Also one Assistant Resident Surgeon. Salary £160 per annum. Furnished apartments, attendance, light, and fuel are found for the above surgeons. Applications to Secretary, M. I. Preston, Journal Chambers, Nottingham.

Parish of St. Leonard, Shoreditch.—Resident Assistant Medical Officer. Salary £150 per annum, with rations furnished apartments, and washing in the Infirmary. Applications immediately to Robert Clay, Clerk to the Guardians, Clerk's Office, 213, Kingsland Road, N.E.

Somerset and Bath Asylum, Cotford, Taunton.—Assistant Medical Officer. Salary £160 per annum, with furnished apartments, board, fuel, lighting, and washing. Applications immediately to the Medical Superintendent.

Births.

Greenwood.—On July 2nd, at Corby, Grantham, the wife of A. C. Greenwood, M.R.C.S., L.R.C.P., of a daughter.

Marriages.

Booker—May.—On July 5th, at St. Mary's, Kelvedon, Essex, Charles William Booker, F.R.C.S.Edin., of Witley, Surrey, younger son of Fredk. Booker, of Blackheath, Kent, to Ada Constance, third daughter of the late George May, Tiptree Hall, and of Kelvedon.

Butler—Greenbank.—On July 2nd, at St. Peter's, Ealing, Hedley Ormonde Butler, B.A., M.B.Camb., eldest son of George Butler, of Shanghai, to Louise Alice, only daughter of Henry Greenbank, Ealing.

Fraser—Reynolds.—On July 2nd, at Christ Church, Leeson Park, Dublin, Alec Fraser, M.B.Lond., of Cambridge, second son of Alexander Fraser, Esq., of Blackheath, to Marian, only daughter of Professor Emerson Reynolds, D.Sc., F.R.S., of Dublin.

Mitchell—Hibbert.—On July 3rd, at Holy Trinity Church, Guildford, Arthur Martin Mitchell, M.A., M.D., B.C., D.P.H. Cantab., youngest son of the late Rev. Walter Mitchell, M.A., vicar of Purton, Wilts, to Mary Evelyn, eldest daughter of the late Francis Henry Hibbert, I.C.S., Guildford.

Deaths.

Bond.—On July 1st, at the London Fever Hospital, of scarlet fever, after a few days' illness, Edmund De la Fosse Bond, M.A., M.B. Oxon., M.R.C.S., resident house surgeon of St. George's Hospital, youngest son of the late Revd. Fredk. H. Bond, M.A., formerly of Marlborough, in the 29th year of his age.

Marsden.—On July 2nd, suddenly, at 92, Nightingale Lane, Wandsworth Common, Alexander Marsden, M.D., F.R.C.S.E., aged 69 years.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, JULY 16, 1902. No. 3.

Vienna Clinical Lecture.

PALATAL PARALYSIS.

By DR. S. ERBEN,
Assistant Professor at the University of Vienna.

[*Specially Translated for* THE MEDICAL PRESS AND CIRCULAR.]

THE following case of paralysis of the palate will best illustrate the care necessary for the diagnosis of paralysis in the neighbourhood of the buccal cavity. The patient was a grocer's assistant, æt. 27, who had enjoyed perfect health till three weeks previously, when he was attacked with fever and general prostration. Ten days later he had so far recovered that he could return to work. About a fortnight after this he observed that he could not swallow as well as he usually did, every effort to swallow being followed by regurgitation through the nose or flowing back into the mouth. There was no hoarseness or cough, and the tongue and lips were intact, while speech was perfect. The mucous membrane of the throat and mouth was pale, no inflammation to be observed anywhere, while the tonsils were barely visible. Nowhere was there any white deposit. There was no adenoid growth on the posterior surface of the fauces, but it was observed that the uvula was asymmetric, as both the palato-glossal and the palato-pharyngeal arches were to be seen distinctly deviated to the left side, while nothing but the anterior arch could be seen on the right as the former quite covered the latter. When at rest the arches of the palate were seen as in Figure I., but when phonation was performed the appearance was as in Figure II., which showed the healthy muscles of the right side dragging the uvula to that side.

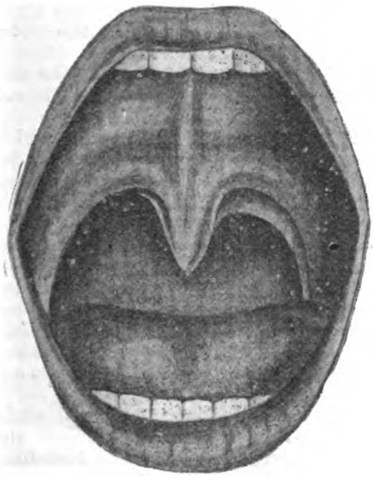


FIG. I.

From this asymmetry it was clear that unilateral paralysis of the palate was present; the drooping state of the palato-pharyngeal arch and the disappearance of the right arch, together with the difficulty in swallowing, all pointed in this direction, unless indeed the asymmetry were due to hypersensitiveness of the right side. The conclusion arrived at at an early period of the case was atony of the palato-pharyngeal muscle. The other muscles involved were the levator palati, circumflexus palati, and the retractor or azygos uvulæ muscles, which are supplied from the spheno-palatine ganglion. The levator veli palatini along with the action of the tensor veli palatini or circumflexus raise and expand the soft palate, while the azgos elevates the uvula. When the forces are still more closely followed the levator veli palatini raises, while the circumflexus or tensor veli palatini extends outwards the opening into the fauces. The opposite mechanical effect is produced when the constrictor isthmi faucium or palato-glossus and palato-pharyngeus are brought into action.

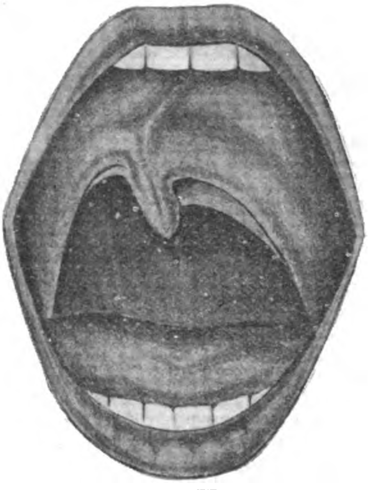


FIG. II.

In searching for a cause we cannot put aside the local inflammation in the throat which has been recently acknowledged by competent authors both in France and England to be a possible cause of neurosis of the motor nerves of the soft palate. Ephraim, of Breslau, records one of these rare cases where the uvula was affected; others are found in German literature where paralysis of the levator veli palati allowed the palate to droop in connection with a lesion of the vagus accessorius or facial nerve.

If no lateral deformity be present such as dragging to the healthy side, as in the present case, paralysis of the levator veli palatini alone might be inferred, but the case before us is unique in affecting one side only by a local inflammation, and as the asymmetry was only developed on phonation or intonation, it is just possible that the supreme effort of the right tensor veli palati or circumflex may be more energetic than the left, as seen in Figure II., where the raphé is drawn to the right.

The results showed that the greater elevation on the right side could not altogether be dependent upon the paralysis. The phenomena remained stationary during the following two weeks' treatment, while the electric current produced no tangible effect.

The following epitome may be repeated for a clear comprehension of the case. The complete elevation of the velum palati on the right side proved the integrity of the levator veli palati muscle as well as the circumflexus or tensor veli palati, while its hyperextension would be due to the loss of outward traction in the palato-pharyngeus. The passive uvula retains its normal position till disturbed by the displacement in the other parts by unequal forces, such as phonation, while the posterior pillar of the fauces hang down loose pointed to the paralysis of one isolated muscle, viz., the palato-pharyngeus.

After three weeks' treatment deglutition was performed quite freely. Inspection proved both sides of the posterior velum palati to be equally distended and the arcus palati normal in the power of distension.

ACTINOMYCOSIS OF THE LUNG
WITH
SECONDARY SKIN INFILTRATION
AND
MULTIPLE ABSCESSES
OF THE
CHEST WALLS.

By ROBERT KNOX, M.D. Edin., M.R.C.S., L.R.C.P. Lond.

A comparative study of the clinical course of actinomycosis of the lung and some forms of tuberculosis is interesting on account of the similarity which exists between the two diseases. So closely may actinomycosis of the lung resemble tuberculosis that it is only when a microscopic examination of the sputum is undertaken that a definite diagnosis can be made. Yet on closer analysis of the sets of symptoms differences can be detected which individually may be of little help, but when used collectively may point towards a positive diagnosis, or at least give rise to the necessary amount of doubt which leads one to carefully examine sputum and discharges for micro organisms. The striking differences between actinomycotic and tuberculous lung lesions are (1) nature of the expectoration, and (2) the character of the hæmoptysis. The physical signs in both diseases are so closely alike as to be practically identical, and as cases of actinomycosis of the lung may be and have been mistaken for tuberculosis it is of the utmost importance that this fungus should be looked for as well as tubercle bacilli. The following case illustrates this as well as other points of exceptional interest:—

Patient, a sparely built girl, æt. 18.

Family History.—Paternal: good. Grandmother alive, grandfather died at 70. Maternal: Grandfather died, æt. 44, of "bronchial trouble," and grandmother at 73.

Previous History.—Patient had enlarged cervical glands when seven or eight years old, these were operated upon and healed in due course. Whooping-cough and pneumonia in 1894.

Present illness commenced in April, 1901. About that time she had a number of alveolar abscesses which were troublesome and difficult to heal. She had a congested throat lasting for some time, was generally weak, and was working hard at school, in which she had distinguished herself. In June she went for a holiday to Perthshire, where she picked up, but in July contracted a severe cold and had pain under left shoulder. This apparently was pleuritic. The pain was severe and the temperature high; this was followed by an improvement in her condition for a short time, but there was a relapse with a rise of temperature. In August she was confined entirely to bed for three weeks, and the temperature rose daily until about August 26th it touched 103·5° F. in the evenings. There was some cough and diarrhœa, and the patient lost weight. She was closely watched by a medical man, who detected dulness of the apex of the left lung posteriorly. Under treatment she sufficiently improved by the end of August as to be able to begin the open-air treatment, and to take short walks, although the temperature still rose to 101° daily. This condition continued all September, and she returned to London early in October by short stages. She had gained 6 lbs. in weight during the three months in Scotland, the weight, including clothing, being 5 st. 6 lbs. On the evening of her return she had a slight hæmoptysis, not for the first time, but previous attacks were mere sanguineous streaks on the sputum. At this stage of the illness the writer was called in. There was dulness at the base of the left lung, extending upwards for about three inches; there was comparative dulness at the left apex anteriorly; breath sounds were defective at the base and bronchial at the apex. An abscess developed in the tender area of the back, extending from the apex of the lung to spine of scapula and vertebral column in the middle line. The abscess was opened and drained. The pus was thick, tenacious, yellowish green in colour and very offensive in odour. A slight improvement followed the opening of the abscess. Another and larger abscess then developed at the base of the left lung; there was considerable œdema of the tissues over it. Mr. Godlee saw the patient and suggested actinomycosis, with the result that his diagnosis was confirmed. The patient was immediately put on the potassium iodide treatment.

The skin surrounding the openings of the abscesses became involved, and after two months showed the following characteristic appearance:—

A number of small superficial abscesses which contained thick yellowish pus; a discrete papular infiltration of the superficial layers of the skin occurring in irregular patches and increasing by peripheral extension; the skin between the patches had an œdematous appearance and was of a bluish colour; the abscesses discharged and filled up with flabby granulations which soon protruded beyond the level of the surrounding skin; this tissue consisted of two distinct parts—pale, flabby, unhealthy tissue with centres of necrosis, which after a time were dislodged; the pus contained the characteristic fungus; soon an area of about a square foot became involved.

The patient was now (January, 1902) well under the influence of potassium iodide and showed signs of improvement, her spirits improved, she took food well and slept better than formerly. The temperature, however, continued to keep high and was not at this stage influenced by the treatment, although it was controlled with phenacetin in 5 gr. doses.

Other abscesses made their appearance in the back. These were opened and drained. Later, an abscess developed in the left supra-mammary region. It was opened and continued to discharge up to the termination of the case. A secondary abscess occurred in an axillary gland apparently by direct extension through the lymphatics. This abscess was particularly rich in the characteristic granular bodies. A large abscess appeared behind the sterno-mastoid muscle in the neck; it contained a large quantity of very offensive pus. This was the seventh abscess opened with the knife and all were without general anæsthesia, ethyl chloride being used for local freezing.

Throughout the course of the case alveolar abscesses appeared in the mouth, the pus from one of these was examined and contained the organism. The abscess in the neck appeared to be an extension from the alveolar abscesses. Gradually the discharges from the abscesses ceased, the skin affection improved greatly, but the patient steadily became weaker. Towards the end fresh pleuritic affections became evident, some consolidation of lung tissue appeared, and the patient gradually sank from exhaustion, five months after the detection of actinomycosis and twelve months after the first symptoms of illness.

Treatment.

It may be noted that the patient had always been dyspeptic and a poor eater, and in the early stages of the illness medicinal treatment was directed to relieve the gastric symptoms and generally to brace her up. As soon as actinomycosis was diagnosed, potassium iodide was administered in 5 gr. doses thrice daily, rapidly increased, so that within four weeks she was taking 80 gr. daily. At this it stood for two weeks, then 30 gr. were given thrice daily, and occasionally a fourth dose was given. In January-February the dose was still further increased to 55 gr. thrice daily, 60 gr. being given for a few days only. It was found that during the five months the patient took 16,320 gr. of the iodide, or an average of 103 gr. daily. In the first instance, 30 minims of tincture of gentian were given with each dose, but this was omitted at the patient's request, and apparently with benefit. It was also observed that if a dose of the iodide were given first thing in the morning, the patient felt brighter and better all day. Minute doses of perchloride of mercury were combined with the iodide on several occasions, but in about four days they induced diarrhœa, and had to be stopped. It may be noted that the maximum dose of iodide given was equal to 1 gr. per pound of body weight.

Symptoms of iodism were slight and easily controlled by increasing the dose of iodide. When the 30 gr. doses were reached there were no iodism symptoms, and it seems that there is little reason for hesitation in pushing the dose to the extreme limit by 5 gr. increase of dose every second day from the commencement. The influence of the drug was evidenced in several ways. The abscesses which developed late in the case healed more quickly than the earlier ones. Though the lung condition did not appreciably improve under the influence of the iodide, yet it apparently checked fresh extension of the morbid process.

The specific influence of the iodide upon the fungus was negative; throughout the course of the case frequent examinations of the sputum and pus were made, and no appreciable diminution in this respect was observed. The pus from the last abscess contained the fungus in as large numbers as in the earlier ones.

One marked effect was produced in the change which took place in the character of the pus. That from the later abscesses, with one exception, was distinctly less offensive than in the earlier ones, and there was no evidence of the presence of the pyogenic organisms which were so abundant in the earlier abscesses before the patient was fully under the influence of the iodide. During the administration of the iodide the patient steadily lost weight in spite of the large quantities of nourishment she took. The loss was due no doubt to the exhaustion caused by the lung condition.

The iodide undoubtedly aided in the marked improvement which took place in the skin affection. The treatment of this gave the most satisfactory results, and well illustrates the possibilities of cure in a simple case of actinomycosis of the skin. At one time the outlook was hopeless. The skin was rapidly becoming affected by peripheral infiltration. The affected area was studded with abscesses and ulcers in all the stages of discharge, granulation and partial healing. Double cyanide gauze was the sole application at first. This was followed by iodoform gauze, which did so much better that iodoform in large quantities (an ounce as emulsion daily) was used with marked benefit. This was changed to potassium iodide ointment with still greater benefit. Mercuric iodide (1 in 5,000) was added, but this ointment liberated free iodine on contact with the pus and had to be discontinued, the irritation and pain being intense. Peroxide of hydrogen was next used in diluted forms (1 part of 10 vol. solution and 15 parts water to begin with) by spray and dressings of lint soaked in the diluted preparation. Under its influence marked improvement was noticed, the discharge from the surface became less, the granulations were reduced and became healthy healing surfaces, and epithelium gradually covered the exposed parts. Towards the end the skin had practically healed. The writer would call special attention to this result, for peroxide of hydrogen not only acts as an oxygen carrier, thus giving the advantage of the oxygen treatment, but, as Mr. R. F. D'Arcy (*Philosoph. Mag.*, January, 1902) has shown, the particles of peroxide in decomposing are electrically charged, and it is not unreasonable to suppose that an unhealthy surface is benefited by this electric fluid. It is important not to use the preparation too strong. Most benefit was derived from one drachm of Tyrer's ten-volume peroxide in two ounces of water; one part of the peroxide and four parts of water acted as a caustic and delayed healing. The skin was washed daily with ethereal soap solution and occasionally with ichthyol and tar soap.

The case in the earlier stages was identical with tuberculosis of the lung—loss of weight, cough, expectoration, sweating, hæmoptysis, physical signs of pleural effusion, consolidation of lung and hectic temperature. The points of difference were (1) the nature of the expectoration, which was thrown off in smaller masses which were rounded and tenacious; it had not the nummular character so evident in a tuberculous case; it was not purulent. 2) The cough was very troublesome. (3) Numerous attacks of hæmoptysis occurred. They were never serious, and usually came on after a severe attack of coughing or when the patient lay on her right side. At no time did hæmoptysis threaten to render the outlook serious.

The abscesses appearing on the posterior aspect of the chest walls gave rise to doubts as to the nature of the case. They apparently originated in the pleura and pointing outwards appeared in the back. The first abscess led to a fistulous opening into the lung substance, and for a time air was forced out when the patient coughed. It communicated with a bronchus. This healed up on two occasions, but reopened, and was one of the most distressing symptoms during the last week of life.

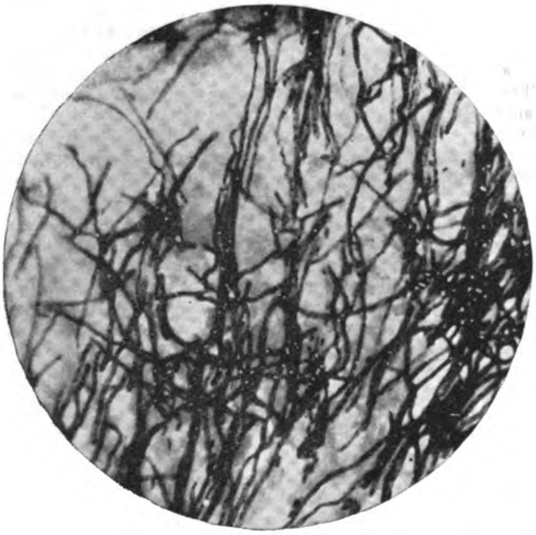
The lung substance appeared to be riddled with the growth, as proved by the occurrence of the abscess first on the posterior aspect and later on the anterior in the supra-mammary region. The latter abscess corresponded with the dulness over the left apex anteriorly. The pus from this abscess contained the fungus and also showed microscopic evidence of pleural origin. The right lung was comparatively free from active change, though there was evidence of pleural inflammation over the base posteriorly. The pericardium and heart remained unaffected. The abdominal viscera did not show any physical signs which would point to an implication of those organs. The urine did not contain albumin. The writer may here express his indebtedness to Dr. W. Harrison Martindale for frequent confirmation of the microscopic observations.

The point one would like to have cleared up in the therapeutics of actinomycosis is the nature of the action of potassium iodide on the morbid process. That it does not destroy the fungus is proved by the persistence of the organism in all the discharges and sputum examined at intervals during the time the iodide was administered. From the quantity of iodide given one would have thought that if it had any specific action it would have been manifest after the tissues had become saturated with it. The explanation may be that iodide acts by causing the absorption of the products of the accompanying inflammatory changes which the actinomycosis sets up in the tissues, and so leads to an arrest of the progress of the morbid changes This action was evident in that portion of the disease which was open to observation on the back. Undoubtedly the healing which took place there was due in part to the action of the iodide, and if it took place there presumably the same process takes place in the deeper structures.

Microscopic Examinations

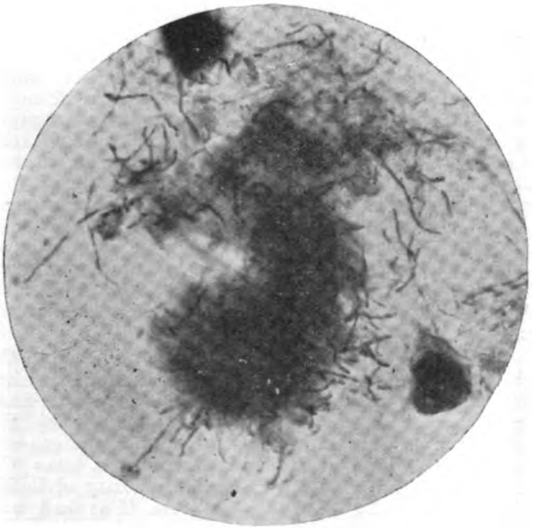
of the sputum and pus in the case above described have from time to time been conducted by Mr. W. Harrison Martindale, Ph.D. Marburg. It may be interesting to append a short synopsis of his reports:—

On November 16th, 1901, a specimen of pus, which had been removed from a large abscess on the back was submitted for examination, and was found to contain a fungus having the strongest resemblance to streptothrix actinomycosis. The typical yellow granular particles were traced in the pus, teased out, and stained by the Gram-Eosin method. On this, the initial examination, B. tuberculosis was also searched for with negative result.



Actinomycosis preparation from pus x 1,000.

On November 25th, 1901, a specimen of the patient's sputum was submitted. Here also the small lemon-yellow nodules were detected and stained by the Gram-Eosin method, and the mycelium of a fungus with the characteristic appearance of streptoactinomycosis was observed.

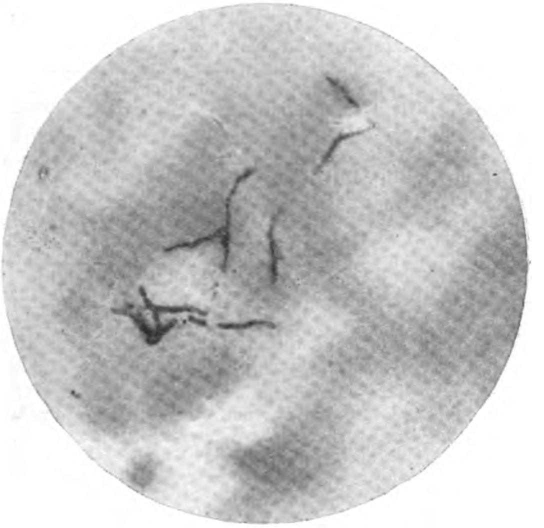


Actinomycosis cover-glass preparation from sputum x 1,000.

On February 20th, 1902, a further species of pus of pleural origin, which had been removed on lancing an abscess over the left breast, was again found to contain the parasite.

On March 10th, 1902, a further specimen of pus was sent for examination. This had been removed from an abscess which rapidly formed in the left axilla by direct extension from the supra-mammary abscess. Six films were prepared from this by the customary method, and found to contain the fungus. Coccus-forms staining by Gram's method were not observed.

On March 19th, 1902, some of the pus from an alveolar abscess of the patient was forwarded for examination. Eight films were prepared and subjected to careful search. In two only of these was there any evidence of the parasite, and the mycelium in these instances was in no way so typical or so markedly developed as that which had been previously detected from time to time in the pus.



Actinomycosis preparation from alveolar abscess x 1,000.

On March 20th, 1902, nine films were prepared from the typical nodules in a further specimen of pus. Some remarkably well-stained slides were obtained. No coccus-forms staining by Gram's method were observed.

To refresh the memory of those who have not recently had occasion to conduct a microscopic examination for the fungus in question, the most trustworthy method for identifying the fungus may be briefly detailed:—

1. The specimen should be poured into a flat glass dish with a sheet of black paper beneath. The characteristic yellowish particles should then be searched for, removed with the aid of a pair of fine-pointed forceps, and carefully teased out on a micro-slide or cover-glass.
2. The film is carefully dried over the flame, and "fixed" by passing through the gas jet three times, *secundum artem*.
3. The preparation is then stained with anilin-gentian violet solution for five minutes or so.
4. The surplus of stain is decanted, and the preparation is covered with Gram's iodine solution.
5. Washing with alcohol is now conducted until the washings are no longer violet tinted.
6. The preparation is then rinsed with water, and counterstained with a little aqueous Eosin solution for a few seconds. It may then be dried and mounted with xylol balsam.

Thus stained, the violet-coloured mycelium of the fungus in the form of tangled webs or scattered filaments will manifest itself on a pink ground (leucocytes, epithelia, &c.) on examination with a sixth of an inch objective, or it may, indeed, be demonstrated with a power as low as two-thirds of an inch.

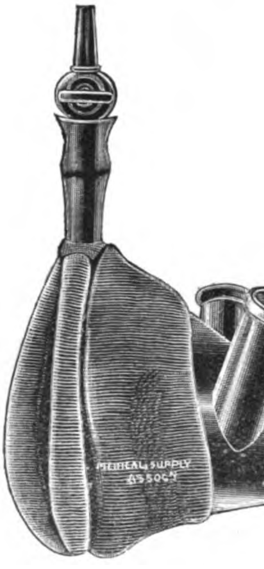
It need scarcely be said that in virulent cases the fungus may be found by simply working on a small quantity of the pus, &c., without searching for the characteristic nodules. Furthermore, the "rays" may be observed without staining, but the stained specimens are confirmatory and valuable for reference.

THE PROLONGATION OF NITROUS OXIDE ANÆSTHESIA FOR DENTAL OPERATIONS BY PATERSON'S METHOD. (a)

By T. PERCY C. KIRKPATRICK, M.D.,
Anæsthetist to the Dental Hospital, Ireland.

The results which have been obtained by the use of nitrous oxide and oxygen, and even nitrous oxide and air, in producing and maintaining anæsthesia for general surgical operations, have from time to time strongly suggested to anæsthetists its possibilities for the more prolonged operations in dental surgery. Since the introduction of this anæsthetic by Horace Wells in 1844, it has always been looked on with particular favour by dental surgeons, and this is not to be wondered at when we consider the conditions under which most of their operations are performed. The one great drawback to its use was that the duration of available anæsthesia could only be reckoned by seconds even in the most favourable cases. To obviate this difficulty, and to devise some means by which the gas might be administered during the performance of a dental operation, has been the object of much investigation among anæsthetists of recent years, and in this connection the names of Coleman, Coxton, McCardie, Hilliard and Paterson stand prominently forward as pioneers. The work of these men has abundantly proved the possibility of so prolonging nitrous oxide anæsthesia, but whether it was from the complication of the apparatus or difficulties in its use the methods recommended never appeared to find much favour. About a year ago I started working on this subject, and used for my experiments a mouth tube slightly modified from the pattern suggested by Mr. McCardie, of Birmingham. With this apparatus I got fairly good but not uniform results. I was able to get on several occasions quiet anæsthesia for as long as four and a-half minutes, but on other occasions I was unable to materially prolong the ordinary gas anæsthesia, and attempts to do so were attended with rather disastrous results. My failures were mostly with men, while the good cases were mostly with women. Even in the cases which might be fairly called successful the method was open to very grave objections. The apparatus was very difficult to manipulate single handed, while a great deal of gas was used, and the apparatus was cumbersome and complicated. I also found that the stream of cold gas entering the mouth condensed the moisture in the expired air, which, issuing like a cloud of steam from the mouth, greatly impeded the view of the surgeon. In the face of these grave drawbacks I determined to try the nasal inhaler devised by Mr. H. J. Paterson, Anæsthetist to the Dental Hospital of London. I began using this apparatus in June of last year, and since that time have only used ether in five cases in my hospital practice out of a total number of 495 cases. I do not wish to be understood as claiming that these 490 cases were all uniformly successful, some of them were and some of them were not; but as I got more experience the percentage of good cases became greater, and now an unsatisfactory anæsthesia is the exception, and I am glad to say a rare exception too. This improvement in my results I attribute to two causes—first, increased experience as the result of practice; and secondly, an improvement in the form of the apparatus which that experience has suggested. Paterson's apparatus, which is made by Messrs. Barth and Co., consists of a small metal cover made to fit the nose accurately with the aid of a rubber pad. Two small metal tubes are let into the nose-piece, and to these are attached two rubber tubes which lead to an ordinary gas bag, a two-way stop-cock intervening. In using the apparatus the nose-piece is placed *in situ*, the bag being filled with gas and the stop-cock turned on. The patient is now breathing gas through the nose only, and expiring through the mouth. The use of the mouth cover is, Paterson says, not absolutely essential, but it diminishes the period necessary for the production of anæsthesia, and so economises gas. At the time when Paterson first described his apparatus the longest period during which he had maintained anæsthesia by its means was nine minutes and fifty-five seconds. This was at a public demonstration at Cambridge on a man, æt. 35. The patient was kept absolutely quiet and recovered after a very few minutes. During anæsthesia two teeth were prepared for crowning and eighteen teeth extracted. Probyn-Williams, writing in September, 1901, states that the longest time for which it has been employed is fifteen minutes. When I first began to use this apparatus I found great difficulty in getting my patients to inspire by the nose and expire by the mouth. I was never able to anæsthetise them without the use of the mouth cover, and even with it often had great difficulty. To obviate this I had a nose-piece made with an ordinary expiratory valve, so that the patients breathed entirely through the nose and I was able to induce anæsthesia with the mouth closed. This method I found a very decided improvement and much more agreeable to the patients. The success of this method of administration entirely depended on the establishment of nose breathing during the induction of anæsthesia, and trusting that the habit so formed would persist during its maintenance. This answered very well in a certain number of cases, notably in intelligent patients and in that class of person such as women and young men, who are particulary favourable subjects for gas anæsthesia, but the continuance of the anæsthesia was quite beyond my control as long as the air way from the mouth was open. It will be obvious to everyone that with each inspiration the pressure in the naso-pharynx and larynx being lessened if the passage from the mouth were open, air must pass in, and so the gas being diluted the anæsthesia would pass off. In order to get over this difficulty, I was in the habit of introducing a sponge into the back of the mouth, so as to occlude, or at all events limit, the air way from it. This, though it acted fairly well, was open to many objections, and I found that though it materially increased the number of good cases, still a certain proportion were unsatisfactory. The sponge was often in the way of the operator, and, if it were pushed far enough back to make it thoroughly effective, it often completely occluded the air way and the patient, getting neither air nor gas, rapidly became asphyxiated. I must admit that at this stage of my experiments I became very disheartened with the method, for though I felt that often as I might deserve success yet I never could command it, and those cases in which I wished for it most were those in which I got it least. It was obvious that what was needed was some method by which we could compel the patient to breathe the gas fairly free from the admixture of air, and only admit at will so much air as was necessary to prevent asphyxia during the maintenance of a prolonged anæsthesia. This had, I felt, to be effected without the introduction of any apparatus into the mouth, for any such procedure would so complicate the method that it would seriously cripple its general utility. In the solution of this difficulty I had to return to Paterson's original model of the nose-piece, so that by increasing the pressure in the gas-bag I was able to raise the gas pressure in the naso-pharynx to such an extent that the soft palate was pushed forward against the tongue, so closing the mouth way from behind, and enabling the gas to pass freely and without admixture of air into the lungs with each inspiration. This, of course, was Paterson's original idea, and to efficiently carry it out a closed nose-piece during the maintenance of anæsthesia was a necessity. By the simple mechanism of fitting a movable cap over my expiratory valve I was able to shut this valve out of action, and had at will either a valved nose-piece for the induction of anæsthesia or a closed one for its maintenance. With the use of this apparatus I have had most excellent results, results, too, which are, I believe, as uniformly good as can be obtained in any form of gas anæsthesia. This gain in efficiency has been obtained without any sacrifice in the simplicity of the original apparatus, and without introducing any complication in the method of its use.

(a) Paper read at the meeting of the "Odontoblasts Club," April 28th, 1902.



Nose-piece modified from that of Paterson, with expiratory valve, the cover of which can be rotated so as to close the slot and put the valve out of action.

There are a few practical points which experience has taught me are essential to success in carrying out the administration, and as they may be of use to those who intend to use it I shall mention them briefly.

It is of the greatest importance to see that the nose-piece fits accurately, and that it is properly inflated, for if it is not it is impossible to exclude the air from entering by the nose, and imperfect anæsthesia will be the result.

Patients, as a rule, object very much to having the mouth propped widely open during the induction of anæsthesia, indeed, I have been told over and over again by patients that it was the one thing in the anæsthetic that they objected to. In using the valved nose-piece, it is distinctly an advantage to have the mouth closed during the induction, so as to insure a more regular and complete nose breathing. It is very important to make sure before starting that there is sufficient space between the teeth for the introduction of a Mason's gag, for if there is not the teeth are often so completely closed that it may be impossible to open the mouth without a degree of violence, which may be injurious to the teeth. For this purpose, I use a small mouth prop which is just sufficient to separate the teeth, but not large enough to keep the patient from closing the lips. It is not necessary to put the patient nearly so deeply "off" with this method as with the ordinary one, for as soon as anæsthesia has been induced the operation may be started, and during its continuance the anæsthesia may be continued at the same level or deepened as circumstances require. I find the time required to induce anæsthesia is considerably longer than that stated by Hewitt in his account of the method. From careful inquiry among intelligent patients I find that they generally lose consciousness after from seven to nine respirations, and it needs several more before the reflexes are abolished sufficiently to permit the operation to be proceeded with. I find the average time taken to induce anæsthesia is between three-quarters and one minute. The most trustworthy signs of anæsthesia are a slight loss of the red colour of the lips, not amounting to actual cyanosis, and as this becomes evident there is an alteration in the rhythm of respiration, it becoming a little deeper and more frequent. The conjunctival reflex is dulled or lost, while the corneal reflex is practically unchanged and the eyeballs tend to become fixed, or there is a slight lateral nystagmus.

When anæsthesia is established I shut off the expiratory valve anddistend the gas bag so as to have the gas in the naso-pharynx under a certain pressure before the mouth is opened. During the continuance of the administration the bag must be kept distended, and if there are any signs of the anæsthesia passing off all that is necessary is to slightly increase this pressure at the beginning of inspiration. Movements generally indicate want of oxygen which can best be given by reducing the gas pressure and so letting air enter by the mouth; phonation indicates too light an anæsthesia and calls for an increased gas pressure. If there is deep cyanosis the administration should be stopped for one or two respirations; if apnœa has been induced the administration should be stopped entirely till either the colour or the respirations again return, but provided the pupil is not dilated there is no need to interrupt the operation. If the breathing stops and there is cyanosis with dilated pupils the operation should be interrupted till the respiration is again re-established. This latter condition I have never met with yet. If in spite of the precautions which I have mentioned the patient shows signs of coming to it is best to stop the operation, open the expiratory valve, close the mouth and so reanæsthetise the patient. I find that if this is done they seldom remember the interval, no matter how conscious they may appear to have been.

As regards results, these may be looked at from three different points of view—that of the patient, that of the operator and that of the anæsthetist.

From the patient's point of view there is no comparison with ether anæsthesia. The taste of the ether, the nausea and prostration which follow in the vast majority of cases where it is administered even for very short periods is without counterpart in gas anæsthesia, even after its prolonged use. Of course it is needless to remark that a patient who has been anæsthetised for four or five minutes while eighteen or twenty teeth have been extracted will not feel so well as after an administration, the available anæsthesia of which is measured by seconds. There are two objections to the method from the patient's point of view: one, which is common to any gas anæsthesia, is that the patient wakes up so quickly and completely that a good deal of the immediate after soreness is felt. The other objection is that after a prolonged administration there is often a good deal of headache, but this does not as a rule last long and certainly is not worse than after ether.

In a certain number of cases there is undoubtedly a good deal of discomfort after a prolonged operation under nitrous oxide anæsthesia, but how far this is to be ascribed to the anæsthetic and how far to the operation it is difficult to determine. Patients are apt to think if the operation has been performed under gas anæsthesia that no matter how prolonged it may have been they should be no more incapacitated than when only one or two teeth have been extracted. In consequence they endeavour to return at once to their ordinary occupations, and are surprised to find that they suffer from symptoms of shock for some days after. It should be remembered that after a prolonged dental operation, where many teeth have been extracted or where there has been much laceration of the gums, there is likely to be much more shock than in many of the minor operations of general surgery. To this shock must be added the almost inevitable result of a certain amount of septic absorption from the open wounds in the mouth. Such patients should be carefully prepared for operation by having their bowels well moved by some purgative medicine, and, if to this is added further purgation after the operation with enforced rest and antiseptic treatment of the mouth, little will be heard of unpleasant after effects of the anæsthetic. In cases where the anæsthesia is attended by much cyanosis there will undoubtedly be unpleasant after effects, such as headache and depression, but such cyanosis is not in any way a necessary result of the method and should always as far as possible be avoided. While laying stress on these after effects, I would emphatically point out that they are the exception and not the rule, just as we find in exceptional cases after ether anæsthesia there are no unpleasant after effects, so after prolonged gas anæsthesia in exceptional cases we meet with unpleasant results.

From the operator's point of view there is, I think, no objection to be urged. He starts his work, be it much or little, with the knowledge that he has ample time to finish it without hurry, and with the knowledge also that if any accident occurs, such as the fracture of a tooth, he has time to remedy it. The objection urged by Hewitt, that "though absolute immunity from pain may be secured yet the type of anæsthesia can hardly be regarded as satisfactory in the modern sense," can hardly be maintained since the type of anæsthesia is in the majority of cases quite as good as that of nitrous oxide and oxygen, or ether. The advantage to the dentist of the speedy after recovery of his patient without sickness is one which is greatly appreciated.

The chief advantage that the anæsthetist gains is the knowledge that he is doing the best for his patient and the operator, since as a rule it will be undoubtedly easier for him to prolong anæsthesia by the administration of ether than by gas, the latter, too, being more expensive, but to these objections little weight can be attached. As compared with nitrous oxide and oxygen he is at a distinct advantage, since the apparatus is much more simple and portable and not nearly so expensive, and in similar operations very much less gas will be used. Although it is an advantage, it is not by any means necessary, to have an assistant present during the operation; there is no more necessity for such assistance than when any other anæsthesia is employed. The anæsthetist can manipulate the apparatus and steady the head with one hand, gas being admitted from the bottles by the foot key in the ordinary way, while the other hand is at the disposal of the gag. I think we may claim without reservation that every dental operation which can be done with gas and oxygen can be done as well, if not better, by this method, while many others which cannot be done with gas and oxygen at all can with ease and safety be done by this new method.

As to the results which I have myself already obtained by the method during the present year in my hospital practice, I would add briefly the following particulars:—

The longest period during which I have administered gas by this method is seventeen minutes, in a man, æt. 20. There was fifteen minutes of perfectly quiet anæsthesia, during which time thirty teeth were extracted, some of them being very difficult. The patient made an excellent recovery, without any bad symptoms. I have had six cases in which there was over ten minutes of available anæsthesia, and sixty-one cases in which it was of three minutes or upwards.

The following are the results of a recent morning's work at the hospital:—

Patient's Name.	Age.	Operation.	Remarks.
John W. ...	20	13 teeth	1½-3m very quiet.
Frank L. ...	13	4 teeth	¾-1m excellent.
Robert B. ...	16	5 teeth	1-1¼m some cyanosis.
George P. ...	21	6 teeth	1-3½m slight cyanosis.
William G. ..	16	8 teeth	¾-1½m excellent, quiet.
Private H. ...	20	6 teeth	¾-2½m very good case.
Jervis C.......	12	5 teeth	¾-2¼m a little movement.
Joseph F. ...	15	6 teeth	1-3m very good.
Michael C. ...	16	6 teeth	1-4m excellent case.
Claud McD...	20	23 teeth	1-7m excellent.
Violet F. ...	22	13 teeth	1-2m a little hysterical after.
Michael C. ...	14	2 teeth	1¼m very good.
James McG.	23	6 teeth	1-10m excellent all through.

We were one hour and thirty-five minutes getting through these cases without any undue hurry, and I used just 200 gals. of gas, during administration extending over 51¼ minutes, an average of between 3 and 4 gals. per minute.

CAPTAIN W. Cox, of the Indian Medical Service, has been mentioned in despatches for gallant conduct in the Mahsud-Waziri blockade.

A CONTRIBUTION TO THE STUDY OF TROPICAL ABSCESS OF THE LIVER. (a)

BY RICKMAN J. GODLEE, M.S.LOND., F.R.C.S.ENG.,
Holme Professor of Clinical Surgery, University College, London.

IN the course of an experience of tropical abscess of the liver somewhat large for an English surgeon, though ridiculously small as compared with that of those practising in the tropics, I have been led to think about the disease and its complications, and I trust that the following contribution to its study may be, if disjointed, not therefore without interest. Possibly it may elicit some useful comment and criticism, and it is on this account that the statements contained in it are somewhat dogmatic. I will deal first with some of the complications.

Perihepatitis, usually perihepatic peritonitis, is an almost invariable accompaniment of tropical abscess, and must always exist to a greater or less extent when the abscess reaches the surface of the liver, but it is astonishing how little there is in some cases even when the matter has approached within perhaps half an inch of the surface. If there be no adhesions the introduction of an exploring trocar or an aspirator needle into the liver will be probably immediately followed by the escape of pus into the peritoneal cavity. Supposing the needle has been introduced for the sake of discovering the existence of an abscess, and the operation for its evacuation be immediately proceeded with, there may yet have been time for a quite considerable quantity of pus to have escaped in the few minutes which have elapsed before the peritoneum is reached. It is even possible to mistake this free pus for the abscess itself. The further exploration of the liver under these circumstances is essential. It is scarcely possible under these circumstances to sew the liver up to the abdominal wall, as each stitch will most likely enter the abscess cavity and the stitch holes will leak. It is safer, therefore, to pack round the part where the incision is to be made before the abscess is actually opened, and after the opening has been made to manipulate the parts as gently as possible. Perihepatic peritonitis is the cause of the acute pain that is often met with as distinguished from the typical liver pains. This pain is, of course, superficial, and is accompanied by acute tenderness, easily elicited by even light percussion. Peritonitis occurs often in definite attacks, accompanied by fever and vomiting, and often yields a useful physical sign—*i.e.*, *friction*, which may be felt with the hand and heard with the stethoscope over the liver. It exercises a protective effect by shutting off the part into which an abscess is pointing, so that when rupture occurs a sub-diaphragmatic abscess results, and not a general peritonitis.

As might be expected, peritonitis most commonly affects the convex surface of the liver, which thus often leads to the adhesion in whole or in part of this surface of the liver to the diaphragm. When this has occurred an enormous amount of pus may accumulate in the liver without giving rise to any enlargement downwards, and the enlargement upwards may only be indicated by partial dulness in the lower part of the chest; the dulness is least marked when the lung is adherent to the pleura because the lung cannot be then displaced upwards by the approximation of the diaphragm to the chest wall. Perihepatic peritonitis may also occur on the under surface of the liver and may then give rise to very serious results. The stomach, duodenum, and colon may become firmly adherent to the liver and after the abscess has been evacuated the consequent contraction may lead to considerable displacement of these viscera, giving rise to such troubles as dilated stomach from kinking of the duodenum. But it is a much more serious thing if the transverse fissure and the small omentum have been the seat of the peritonitis, for any one or all of the hepatic ducts may be partially or completely obstructed.

The escape of the whole of the bile through the wound is fortunately not of common occurrence. I have never before met with it in cases of tropical abscess, though I have seen it in hydatid of the liver. It does not necessarily lead to loss of appetite or difficulties in digestion, but it sooner or later causes emaciation which may become extreme. I have seen bedsores form over the projecting angles of the ribs and angles of the scapulæ. I am permitted by the kindness of my friends, Dr. Manson and Sir W. H. Bennett, to mention the only other two instances which I have heard of in connection with tropical abscess, and I would suggest that in fatal cases the same condition as that which occurred in the one that I have just described will be met with. In Dr. Manson's case the patient died after four months in a state of extreme emaciation, though the fistula was apparently beginning to close; and in Sir William Bennett's case the sinus gradually closed after seven months, and the patient made a complete recovery. In connection with this subject, reference may be made to cases, with which all will be familiar, where there is complete obstruction to the common bile-duct either from calculus, tumour, or inflammatory adhesions. These patients do not, so far as I have seen, emaciate; on the contrary, their nutrition may remain fair for years, and it is quite remarkable how long the fatal event may be delayed.

(a) Abstract of a Paper delivered before the Royal Medical and Chirurgical Society on May 13th, 1902.

It has been shown by the beautiful observations of Klein that the direction of the flow in the lymphatics of the diaphragm is upwards. As might, therefore, have been expected, pleurisy is a very common accompaniment of tropical abscess. It is a useful diagnostic sign. It is also a note of warning. Rupture into the pleura is in my experience one of the most dangerous outcomes of this disease. I could, if it were advisable, give more than one example of this catastrophe being followed by the most extraordinarily rapid pleural effusion. In one, indeed, though I saw the patient within twenty-four hours of the rupture of an abscess which had for so many months remained dormant that its very existence had been doubted, the patient appeared to be moribund, and the pleura contained an enormous amount of fluid. But even when the pleura is opened at once, if the lung has not previously contracted adhesion to the chest wall, it is not unlikely that it may collapse against the spine and never expand again, and the most extensive Estlander's operations may fail to effect a cure. The patient, therefore, who has extensive pleural adhesions is saved from very grave dangers.

It would often save trouble and anxiety if the presence or absence of such adhesions could be determined. This is, however, notoriously difficult and often impossible, which is my excuse for mentioning two aids to diagnosis which have not, I think, received sufficient attention. 1. The upper level of the dulness caused by a liver which is enlarged upwards is, speaking generally, considerably lowered when the patient is placed on his left side. If, however, the lower part of the pleural sac is obliterated by adhesions this does not occur, because the lung cannot be sucked down into the pleural sinus by the falling away of the liver—that falling away which so frequently causes pain when the patient attempts to lie on the left side. 2. In very thin people, even when the parts are normal, I have pointed out (a) that it is often possible on careful inspection to see the lower margin of the lung on the right side move upward and downward during respiration. It may sometimes be observed on the left side, especially if the spleen be enlarged, or if there be a great enlargement of the left lobe of the liver, or, indeed, any tumour in this situation; and on the right side it is more obvious when the liver is enlarged than when it is of normal size. This sign requires somewhat careful inspection for its discovery and it is only of use in emaciated or very thin subjects. If it be present it is a certain proof that there are no adhesions in this situation and that there is little or no pleural effusion.

In connection with the question of adhesions I desire to make a practical suggestion. If the incision for opening the abscess has necessarily to pass through the pleura below the lower border of the lung it is often difficult or impossible to tell whether the cavity is obliterated by lymph or not. I have more than once cut down through both layers of the pleura and as no air has entered I have gone on to incise the diaphragm and liver. On withdrawing the finger, however, the ominous sound made by air rushing into the chest has shown that the two layers of the pleura were at first only held together by the attraction of cohesion or by very feeble adhesions, and a laborious process of stitching up the hole had to be undertaken. The right way to proceed, if there be any doubt, is to cut through the diaphragm across its fibres at the part nearest its costal attachment and to sew up a flap of the muscle to the intercostal muscles at the opposite end of the wound. The incision into the abscess can then be undertaken without fear of producing pneumothorax. By adopting this precaution I do not expect to meet with the above-mentioned accident again.

Pleurisy may lead to serous effusion, or to empyema, without any rupture of the liver abscess through the diaphragm, and such an effusion may keep up the temperature after the successful evacuation of the hepatic abscess. I once opened a large tropical abscess on an Indian army surgeon who was in an extremely exhausted condition. There remained some dulness in the back and the temperature did not fall to normal. The removal by aspiration, several days later, of a few ounces of clear fluid was immediately followed by disappearance of the pyrexia and from this time the patient made an uninterrupted recovery. On another occasion, when the physical signs and symptoms were almost the same, the fluid was pus, and an equally good result followed the insertion of a drainage-tube into the pleura. A less successful result followed in the case of a young officer whom I saw with Dr. Ringer and whose abscess I had opened in the lower axilla. Repeated attempts at aspiration of the chest were unsuccessful, because there was much recent lymph as well as fluid in the pleura. In the hope of securing better drainage I made a second incision into the abscess behind, and in doing so found that I had opened the pleura and a considerable quantity of clear fluid and large masses of lymph escaped. Thinking that some of the pus from the abscess had probably entered the pleura I therefore placed through this second opening one tube into the abscess and one into the pleura, but I am sure it would have been better to have sewn up the opening in the pleura and to have left this cavity for treatment later; for the recent pleural adhesions gave way owing to the violent coughing of the patient, the lung collapsed, and a general pneumothorax was produced. The case was a very septic one and a fatal result was probably inevitable, but I think that it was hastened by the pleural complication. I said that the existence of friction was an *ominous* sign, for although rupture into the lung, as everyone knows, often leads to a rapid cure of the disease, no one who has seen the disastrous results that may ensue would dream of waiting for it to occur. *When there is marked pleural friction, therefore, exploration of the liver should be made without delay.*

I am thus led to the next part of my subject.

Changes that take place in the lungs.—It is obvious that in every case in which an abscess bursts into the lung a certain amount of lung tissue must be destroyed and an abscess of greater or smaller extent must be formed. In those which recover in a short time this is a negligible quantity. But it is often far otherwise. The next most favourable cases are those in which a small abscess forms in the lower part of the lung either in front or behind. Most commonly the signs of cavity will be met with below and to the inner side of the right nipple; but the cavity not infrequently occurs behind, and in rarer cases a liver abscess bursts into the left lung and forms a cavity there. If such abscesses are opened as soon as they are discovered it is probable that they will heal readily. But if operation is delayed a series of phenomena may occur that are not unlikely to give rise to a very chronic condition which may end fatally. These abscesses do not behave like those resulting from pneumonia, injury, or tubercle, but have a peculiar tendency to burrow by means of long and intricate tubular processes which are very difficult to follow up and drain, and may lead to the gradual destruction of large areas of lung tissue. I have seen one lobe almost completely disorganised in the course of an illness extending over many months. The suppurating tracks are sometimes in the lung itself, sometimes partly in the lung and partly in the pleura. The pus discharged from them has the characters which we are accustomed to associate with liver pus—that is, it is inodorous, thick, slimy, and chocolate-coloured, and may contain the amœba coli, so that I am inclined to believe that the peculiarity of the process depends upon the presence of this parasite. In these cases hæmorrhage is a common symptom; it is often frequent and severe and occasionally is fatal. The continued discharge of what has been recognised as liver pus has led to the assumption that the abscess of the liver is still unhealed; but this is certainly not always the case, for I have met with an instance in which the patient, a young man from an unhealthy Indian tea-garden, died from hæmorrhage, and at the post-mortem examination so little trace of the liver abscess remained that the medical man who made the necropsy stated that there never had been an abscess of the liver at all. This, however, I knew to be incorrect, for I had had my finger in the patient's liver, and the observation did not surprise me for I had been struck with the complete way in which all traces of a liver abscess even of large size may disappear. This is surely a not unimportant fact in making a prognosis, and it accounts for the completeness of the cure if recovery takes place. It is also interesting to note that if an abscess forms in the left lung, as a result of the inspiration of matter from the opposite side, the pus formed in it may be slimy and chocolate-coloured like that which came from the original abscess. I do not mean to say that chocolate-coloured pus may not come from a primary abscess of the lung; it may do so, but physicians will agree that this is a most exceptional occurrence. *It may be safely stated that the persistent discharge of chocolate-coloured pus does not prove that the liver abscess is not healed.*

(a) *Brit. Med. Jour.*, Jan., 1900.

Another danger to which a patient with an imperfectly drained abscess of the lung is exposed is abscess of the brain. I have met with two such cases following tropical abscess. In one I opened the abscess myself, and in the other I directed the operation; both ended fatally.

The practical deduction from what has been stated is that *pulmonary abscess consequent on hepatic abscess should be opened without delay*, and that a careful search should be made for outlying suppurating tracks; that these should be drained by the insertion of full-sized tubes, and, as far as possible, laid freely open even if this should necessitate extensive removal of ribs; and, finally, that the tubes should not be removed or shortened until the surgeon is satisfied that closure of the abscess is almost complete.

Dr. Manson, with whom I have been associated in several of the cases that have come under my care during recent years, has shown that in the majority the amœba coli is present in the pus. In some its presence is more easily demonstrated a few days after the abscess is opened than on the day of operation. In some it is found in abundance many weeks later, when the case is perhaps pursuing a normal course towards recovery. There is, therefore, strong suspicion that the amœba has something to do with the causation of tropical abscess. This persistence of the organism and the very slight effect which it may, under some circumstances, produce, possibly account for one of the most striking features of this disease—its occasional extreme chronicity. One cannot fail to be struck with the long periods of time during which an abscess may be latent, with the way in which symptoms that point strongly to the existence of an abscess may disappear, and with the comparatively slight disturbance of health that is not inconsistent with the presence of an abscess. I have known a young officer who was suspected of having an abscess go through a winter's hunting and return to show himself, as he thought, well, though the abscess was almost pointing at the epigastrium, and it is well known that an abscess may show itself years after a patient has returned from the tropics.

Some abscesses, on the other hand, after a long period of latency, suddenly become acutely septic. These cases most likely become infected from some part of the intestinal tract with the bacterium coli commune or some other septic organisms.

Some liver abscesses contracted in the tropics are, on the other hand, acute and septic from the first. These should, I think, be placed in a class by themselves and are not, properly speaking, examples of tropical abscess but are part of a general pyæmic process. They may arise in this country. They are often multiple and, as far as my experience goes, are quite hopeless cases to treat. But some genuine tropical abscesses are very acute. I saw lately a young man from Central Africa who had had many attacks of fever but no hepatic symptoms till he reached Europe on leave. In the course of a few weeks he developed a small abscess in the right lobe. It was easily reached and it healed in a shorter space of time than any other case I have had to treat, a very few weeks sufficing for the cure.

The majority of tropical abscesses that I have seen have been single and I believe that many of the cases which have been reported of a second abscess following the first are those in which the drainage-tube has been removed too soon or in which a diverticulum of the original abscess has never been properly drained and has been shut off from the main cavity. I think it is of great importance at the time of the operation to explore the cavity very carefully with the finger and to open up all branches of it, as far as possible, before the drainage tube is inserted. I am, of course, not likely to forget that the cases which we see in England have been sent home from distant parts of the world, and am prepared to hear that others of a totally different type may be met with by surgeons who are on the spot where the disease originates. I have, indeed, been frequently told that we in England do not see the really bad cases, which may be true, though it must be owned that some of them are bad enough in all conscience.

The last point I would deal with is the question of the *best place to make the incision*, and I will begin by stating that I consider that, if possible, the seat of election for the operation is in the lower axilla. If two lines be drawn vertically downwards, prolonging the anterior and posterior folds of the axilla as far as the margin of the ribs, they will at the lower part inclose the space where the widest interval intervenes between the lowest part of the pleura and the costal margin, an interval generally of two inches and often even greater. The incision may conveniently be made transversely—that is, parallel with the lower margin of the pleura—and the portion of one rib and cartilage that crosses the wound obliquely should be removed, great care being taken to separate the structures on the deep surface of it without injuring the pleura in case by chance it should extend lower than usual. Generally the structure thus exposed consists only of the origin of the diaphragm, but if the pleura should be low it is easily recognised and may without any difficulty be dissected up without injuring it and fastened out of the way to the upper part of the wound. If it should accidentally have been opened the suture of the opening is a simple matter and it is essential to make it perfectly air-tight before proceeding. The rest of the operation consists in incising the diaphragm, either in the direction of its fibres or across them (I prefer the former method), and then cutting through the diaphragmatic peritoneum. If there be no adhesions the liver may either be sutured to the diaphragm and the chest walls or the parts around the opening may be carefully plugged with some antiseptic material. If the latter course be adopted it must not be forgotten that if the abscess be large the liver will at once shift its position and that this shifting will take place in the upward direction.

It may be asked, "Why lay down this dogmatic rule when it is well known that the abscess may occur in any part of the liver?" But to this it may be answered that, in my experience at all events, by far the majority of abscesses occur in the right lobe, and that if they be of large size they can generally be opened in this situation even if they form a projection in the epigastrium or most nearly approach the surface behind. I have already referred to the difficulties and dangers of incising the liver behind, depending upon the fact that it is necessarily a transpleural operation. The epigastric incision does not drain well and I am therefore in the habit, even if the abscess appears to be pointing in this situation, of ascertaining, to begin with, whether or no the matter can be reached at a moderate distance from the side. It is a question whether, if this be found to be the case, and after making the lateral incision the epigastric tumour disappears, the surgeon should be content, or whether he should make an epigastric incision as well. A case recently under my care and referred to in an earlier part of this paper supplies an argument in favour of the latter course. I had been content with the single incision in the side, but it turned out that the epigastric swelling had been caused by a localised peritoneal collection of matter due to the bursting of the abscess in front. The communication was not, however, sufficiently free to allow of satisfactory drainage, and it was necessary to make the anterior opening in the course of a few days.

I do not deny that the epigastric incision is the only possible one in certain abscesses in the right lobe and in all of those that occur in the left lobe. I would strongly deprecate a lateral incision below the costal margin, because the opening is certain to become troublesomely oblique in the course of a few days as the liver shrinks up under the ribs. The opening into the liver itself may conveniently be made with a long pair of dressing forceps followed by the finger. In this way abscesses at a great distance from the surface may be safely reached and effectually drained. Hæmorrhage is often free, but it usually stops spontaneously if the finger be retained for a minute or two in the wound. Should it not do so careful plugging round the tube must be practised. Some cases bleed extensively after the operation and the bleeding occurs on subsequent occasions. I am not referring to the slight hæmorrhages which often occur for many days in cases which are pursuing a normal course, but to those in which the loss is considerable. I look upon this as a grave sign and I think it occurs most in the septic as opposed to what I have called the amœbic abscesses. A certain amount of blood often escapes into the peritoneum as the result of the preliminary puncture. It seldom is of any moment, but dangerous and even fatal cases of exploratory puncture have been recorded. It is not unlikely that these patients are either jaundiced or suffering from leucocythæmia.

I cannot conclude without referring to Dr. Manson's ingenious device of introducing a drainage-tube through a large trocar plunged boldly through all the superficial tissues into the abscess. It has yielded excellent results in the hands of many and I would not say a word against it. But for my own part I prefer to know in what condition I have left the pleura and peritoneum, and to have ascertained what the size and shape and possible ramifications of the abscess may be, to have opened these up if it appears to be necessary to do so, and to have placed the tube or tubes in what seems to be the best position for the future draining of the cavity.

Lunacy Department.

ASYLUM REPORTS.

Montrose Royal.—The following changes have occurred during the year, viz.:—190 admissions, 110 discharges, and 57 deaths. Hereditary predisposition and alcohol are recorded as causes of insanity in 26 and 16 per cent. of the admissions respectively. The recovery rate was 35·2 per cent. (below the average), and the death-rate 8·6 per cent. About 16 per cent. of the deaths were due to phthisis. The detached villa for sixty quiet male patients has been completed and is in occupation, and the Commissioner reports the internal arrangements to be in a high degree satisfactory. Besides completely relieving the overcrowding on the male side, it proves a welcome addition to the curative resources of the institution by providing a comfortable home for convalescing patients who are disturbed by contact with the acutely insane. The total cost of this villa, including furnishings, is less than £115 per bed. A steady increase of private patients has been maintained, especially for Carnegie House.

During the year 29 and 40 per cent. of the cases admitted respectively from Forfarshire and Kincardineshire had a pronounced suicidal tendency. Dr. Havelock's observations reveal that certain parishes in these counties send a very high proportion of suicidal cases to the asylum, and that a possible explanation of this seems to be inherited predisposition.

We note with much satisfaction the managers have joined the Scottish Asylums Laboratory Scheme, and we heartily endorse Dr. Havelock's opinion as to this being an important step in the right direction. This laboratory has been doing much valuable work for the last few years, and it is worthy of, and requires the heartiest sustenance of, all in Scotland interested in obviating and curing insanity. The report is a full one, and things generally indicate efficient management.

Lancashire County.—Whittingham.—This report is full of detail. There is evidently an urgent necessity for increased accommodation. At the date of the Commissioner's visit there were only three vacant beds. The admissions were selected owing to the want of accommodation, beds being reserved for acute cases. The recovery rate was only about 26 per cent. of the admissions, and the death-rate—10·8 per cent.—was above the average. Phthisis was the cause of death in 28 per cent. of the cases, and general paralysis and pneumonia in 15 and 18 per cent. respectively. The percentage of phthisical cases is alarmingly high, and we hope the committee will do something towards stamping out this terrible disease, or at least towards reducing the number of cases. Overcrowding is a recognised cause, and such conditions, we regret to say, here exist. Dr. Perceval makes some sensible remarks on this subject. Only 27 per cent. of the patients are able to attend the entertainments because of the inadequacy of the recreation hall. This proportion is much too small. The social side of asylum life should be as fully developed as possible in the interests of the patients. Intemperance was responsible for ninety-six of the admissions, or 15 per cent. Dr. Perceval in his Report remarks that the more one sees of insanity the more the importance of heredity is forced upon one. "If people could be bred with as much care as horses no doubt many forms of insanity would become unknown." A view which is but too obviously borne out by facts.

Prestwich.—This report contains the usual statistical and economic tables. Here, also, we regret to see, the accommodation, which has been used to its utmost capacity, is in a congested state, beds having to be put in lobbies and other unsuitable places. The rule evidently obtains among asylum committees to delay too long in providing extra accommodation. "Sufficient unto the day is the evil thereof." The percentage of patients usefully employed is satisfactory, but that of the males should be increased if possible. The Commissioners on their visit rightly took exception to the plates and cups in some places, where they were of enamelled iron in a dilapidated condition. We would like to see this class of delf, for which there is no necessity, abolished altogether. We note with pleasure the establishment of a well-equipped pathological laboratory. The number of patients admitted was 448, of whom 107 had previous attacks. The recovery rate was over 41 per cent., and the death-rate only about 6 per cent. Alcohol was responsible for 30 per cent. of the admissions, and pneumonia and phthisis for 20 and 21 per cent. of the deaths respectively—all high percentages.

Berkshire County.—Overcrowding has been keenly felt here too, and as many as fifty patients have been in residence above the allotted number. Therefore, we are not surprised to learn that several cases of enteric and a severe epidemic of pneumonia occurred. The admissions were very unfavourable, 70 per cent. being hopelessly incurable in the opinion of the Medical Superintendent. Hereditary influence was ascertained in 26 per cent., but, notwithstanding these facts, the recovery rate was 38·28 per cent. The death-rate was abnormally high—12·84 per cent. There is no Commissioners' report appended. We would like to see this rectified in future. The dietary for patients is very monotonous and below the average. Individual tastes do not receive much consideration. Dr. Murdoch, in his report, which gives evidence of his desire to be up-to-date in the management, while referring to numerous changes in the staff, remarks, "Our extremely isolated position, with its dull surroundings is, however, the greatest drawback. Increased wages and indoor comforts fail to counteract this serious disadvantage." We would strongly recommend the system of providing houses and engaging married men as a trustworthy means of obtaining a stable and efficient staff.

Germany.

[FROM OUR OWN CORRESPONDENT.]

BERLIN, July 12th, 1902.

AT the Medical Society's meeting the subject of

TUMOURS OF THE SPINAL CORD

was further discussed. Hr. Jolly showed one that measured three centimetres in its long axis, had a smooth surface, and was tolerably hard. Microscopically it was seen to be a pure fibroma. The tumour lay within the dura, and was separated from this as well as from the pia mater without cutting. The origin was probably in the perineural connective tissue. No nervous elements have so far been found in the growth.

At first he questioned the diagnosis, as it was impossible to prove a connection between the symptoms and a cycle accident that had occurred a year and a half before. It was possible that some functional disturbance was connected with it, but this was disproved when spastic symptoms appeared, associated with ankle clonus. Then appeared the possibility of tuberculous disease in connection with the injury. The negative effect of tuberculine injection and also the fact that extension made matters worse disproved this. The question as to whether the tumour was intra- or extra-spinal was doubtful even to the last, and the possiblity that it might be the former justified the undertaking of an operation.

Hr. Hahn had operated six times in the belief that a spinal tumour existed. In all cases the diagnosis had been correct, not only as to its existence but also as to the level at which it had been supposed to be placed, but in no case was the nature of the disease recognised with certainty. In two cases echinococci were present in the vertebral canal. One of the patients recovered, the other died. The third case showed pain in the spine and root symptoms. An operation revealed thickening of the vertebral arches, a kind of exostosis and nothing more. The patient recovered. In two cases there was no tumour, but a cavity formation in the cord, the one being syringomyelia, the other a cavity arising from softening. The last case was that of a patient who had had a stab with a knife ten years before, but who had been quite healthy in the meantime. At the operation a prominence was felt that could not be removed. At the autopsy a knife blade, 2 cm. in length, was found in the tenth dorsal vertebra. He had observed another case, but had not operated on it, which proved to be a metastasis of tubercle after removal of tuberculous glands. After his own experiences he might say that the prognosis was favourable and the diagnosis certain when distinct unilateral symptoms were present without pain in the vertebral column, and in the absence of fever.

Hr. Senator had lately had an old lady in his wards on whom an operation had been performed some years ago for carcinoma of the breast. She had then total motor paralysis of the legs, abolition of sensibility and pain with moreover bladder and bowel disturbances. The whole vertebral column was extraordinarily painful to the touch, and on any movement of the body. The autopsy showed an extradural tumour.

Hr. Remak related a case in which at the operation the tumour was found much more extensive than had been believed. It was the case of a lady, æt. 20, who had suffered for several months from severe sciatica, in which no therapeutic measures afforded the least relief, and where symptoms of paralysis had gradually come on. There was paralysis of the muscles of the left buttocks, partial paralysis of the left peroneus, severe pain in the left leg, with disturbance of sensibility of the external parts of the leg. There was slight bladder disturbance. The sacrum was very sensitive. The question was whether there was a tumour of the cauda equina or one in the region of the third to fourth lumbar roots.

He advised an operation, which, after some delay, was performed by Hr. Krause two months afterwards. The clinical condition here remained practically unchanged. First the fifth lumbar arch was removed, and soon a tumour projected that lay within the dura. The upper sacral vertebra and the arches of the third and fourth lumbar vertebræ were then removed, but the upper end of the tumour was not reached, and the operator desisted from going further as the patient could not bear any more extensive attempts. She died the night following. The autopsy revealed the tumour to be a sarcoma which reached in an upward direction above the swelling of the loins.

Hr. F. Krause remarked that in order to complete the operation he would have had to remove the broad arches of the lumbar vertebræ. The section showed that the tumour had reached four vertebræ higher, whilst the clinical symptoms, after careful examination, indicated the fourth or fifth as the upward limits.

Hr. Oppenheim would utter a warning as to exciting hopes from his two correctly diagnosed cases. Deceptions would arise in case of operative attempts. The absence of tenderness on pressure was not pathognomonic of spinal tumour; it was rather remarkable that the diagnosis in his two cases was correct, although the vertebral columns were not sensitive.

HEPATIC FEVER.

Dr. S. Rosenthal made this the subject of a "Festschrift" in connection with v. Leyden's commemoration. The paper is based on three cases observed by himself, and, after the report of the cases, he summarises his conclusions as follows:—Under certain circumstances at present not fully known, there are in connection with icteric hypertrophic cirrhosis and secondary atrophic liver, intermitting periods of fever which may last days, weeks, or months, interchanging with periods completely free from fever. These intermitting fevers generally come on in the afternoon or evening with or without a preliminary rigor of the quotidian type. Sometimes the type is inverse.

Quinine sometimes acts beneficially, but generally it fails. Arsenic is quite useless. Salicylate of soda is comparatively useful.

Frequent long periods of apyrexia occur, interrupted by a day's intercurring high temperature.

Besides the intermitting type the fever in some individual cases shows the remitting type.

The basis on which the fever rests is as little known as that of the fever of gall-stones. The presence or absence of jaundice is in neither case a deciding factor for the origination of the fever, which is probably of an infectious nature. Frequently-repeated punctures of the liver and spleen, with culture experiments on the most varied nutrient soils, have led to no positive results, neither bacterium coli nor other bacteria having been found. Examinations of the blood for plasmodia have also given negative results.

Austria.

[FROM OUR OWN CORRESPONDENT.]

Vienna, July 12th, 1902.

Prostatic Hypertrophy.

Schlosser reported five cases of prostatic hypertrophy which he had treated by the Bottini-Frendenberg incision, in four of which the operation was successful, but one was a failure. He thought the operation was better than the sexual, or rather the unsexing operation.

Fungus.

Luksch reported a case where he took from the bronchi of a diabetic patient a fungoid growth never before recorded in the history of medicine. This aspergillus is peculiar to pigeons and hens, in which it is pathogenic and easily transmitted.

Tuberculosis.

Hueppe read a paper on our present knowledge of tuberculosis, first remarking that the disposition of the individual as well as the susceptibility of the particular organ were the primary factors to be considered in therapeutics and prophylaxis. To combat the disposition, Brehmer of Görhersdorf has adopted the diabetic treatment with considerable success.

Hueppe next attacked Koch's latest statement controverting the doctrine of the etiological identity of tuberculosis in man and cattle. He referred to his own experiments in conjunction with Fischl to prove the morphological identity in fowls, and how it differs in virulence until a particular stage is reached. He contends that the bacillus of cattle is the same as that found in man. In support of this assertion he mentioned that he had artificially produced lupus in man by injecting cow's milk containing bovine tubercle.

Epstein remarked that the disposition of each organ of the body depended also on the age of the individual. In the infant the bowel seemed to be the favourite nidus, in the juvenile the brain or lymphatics was most frequently the seat of the disease, while the lung was the favourite seat during puberty or in adult life.

Puerperal Metastasis.

Chiari related the history of a peculiar case of puerperal fever which recently came under his observation. The patient was æt. 28 at her fifth confinement, which was described as a normal parturition. On the fourteenth day a rigor with high temperature occurred, which brought her to the gynæcological department for relief. On examining the parts the uterus was found slightly enlarged with a fœtid lochia. A few days after admission the patient had to be transferred to the "interne" clinic, owing to a purulent inflammation in the left shoulder, probably metastatic. After this a general pyæmic condition supervened, followed a few days later by left pleurisy, the effusion being sero-purulent and containing streptococci.

Subsequently nephritis and pustular exanthema exhausted the patient, who died on the twenty-sixth day post-partum.

The post-mortem examination revealed pyæmic foci in all the parenchymatous portions of the internal organs with degenerative changes. The genitals showed no trace of injury, and were in fact quite normal.

The best explanation that can be given of this case is that its origin was septic endophlebitis at the union of the external iliac vein, and the internal where a thrombus two centimetres long was found filled with streptococci which were identical after cultivation with those found in the pus elsewhere. It is also fair to assume from the findings that the poison entered from the uterus by the left uterine vein, and this view is confirmed by the fœtid lochia.

Continental Health Resorts.

[FROM OUR SPECIAL CORRESPONDENT.]

BRIDES-SALINS No. 2 (Savoy).

The medicinal treatment at Brides-les-Bains is principally by drinking. At the neighbouring establishment of Salins-Moutiers the external treatment greatly predominates; although in obstinate cases (where the mineral springs at Brides are not sufficiently purgative) the drinking of the Moutiers saline waters is added to the treatment at Brides.

The Salins-Moutiers springs supply over one and a half million gallons of saline mineral water every twenty-four hours. They rise on the right bank of the Doron (at the foot of a large chalk rock 25 ft. below the ground surface), through several fissures; are collected into two underground reservoirs, and are thence conveyed by canals to the bath establishment on the other side of the river. Their invariable temperature is 95° to 96° Fahr., and they have 2° Beaumé gravity. They contain 16 grammes of salt per litre, considerable chloride of sodium, soda, iron, iodine, arsenic and lithia, with much carbonic acid. Dr. Gubler, a very competent authority, affirms "they are the richest in chloride of sodium of any known waters." Drs. Blanc and Forestier (of Aix-les-Bains), in their report to the Savoy Committee of the Paris Exhibition in 1900, assert their superiority to any similar springs "in Spain, Italy, or even Germany High temperature, concentrated mineralisation, gas in solution, the enormous output per day, being characteristics which place them easily above other saline waters, and so assure to Salins-Moutiers a prosperous future."

These Moutiers Saline Waters have been well described as a "hot sea amidst the Alps," but, in addition to the qualities of the strongest of sea waters, they have the other valuable mineral constituents already named, and being warm, bubbling, and sparkling, are greatly beneficial to those debilitated by illness or suffering from weak lungs. Added to these advantages Salins-Moutiers has that of a situation at an altitude of over 1,400 feet above sea-level, and in the centre of a most picturesque and health-restoring mountain region.

The indications for Salins-Moutiers are all cases arising from atony, debility, rickety anæmia, defective nutrition and assimilation, lymphatism, scrofula, overgrowth, old fractures, dislocations, chronic arthritis and rheumatism, and especially feminine troubles. Writing in 1899, Professor George Buchanan testifies to the "great value of these waters for children of rachitic or scrofulous constitutions; for anæmia, chlorosis, and other debilitating conditions in women." The Moutiers waters are also used at Brides-Salins for heart diseases, as saline waters are at Nauheim.

Their combined mineral salts and carbonic acid render the Moutiers waters easy of digestion. According to Dr. Gubler they are *the sole* saline waters which can be drank in sufficient quantities to be really efficient, and yet be followed by no detrimental results.

A comfortable Hotel des Bains is attached to the bath establishment at Salins-Moutiers. Visitors, however, generally prefer to reside at Brides village, about two miles further up the Doron Valley, and at nearly 500 ft. higher altitude. The two stations are connected by electric tramway. At Brides are an English church and chaplain, a casino and daily concerts, French and English physicians, and half a dozen good hotels, the excellently managed Grand Hotel des Thermes and its annexes being in the same park as the baths, springs, and casino at Brides-les-Bains. For English visitors in search of a health resort "away from the madding crowd" and in the midst of most glorious surroundings, Brides-Salins reaches the ideal.

The Operating Theatres.

ST. THOMAS'S HOSPITAL.

Operation for Simple Depressed Fracture of Skull with Coma in a Child.—**Mr. Battle** operated on a child, æt. 2 years 3 months, who had been admitted a few days before after a fall of 20 ft. from a window on to the pavement. The child had not recovered consciousness since the injury; her eyes were constantly rotated downwards and to the right; she moved the left arm and leg, but the right arm and leg did not respond to stimulus, and were rigid. A depressed fracture could be felt over and behind the left motor area. As the coma appeared to be deepening, it was considered best to trephine in the hopes that some clot might be found, the removal of which would relieve pressure on the cerebral substance. A semi-circular flap was raised and the skull trephined; the fracture was rather irregular, and there was not much depression. After the application of the trephine a small quantity of clot was exposed on the surface of the dura mater, but it was insufficient to account for the symptoms. The opening in the skull was considerably enlarged by means of bone forceps, then an incision was made through the dura mater; there was no blood clot on the surface of the brain, nor did the cerebral substance look bruised; there was, however, an immediate and rapid flow of cerebro-spinal fluid. It was not considered advisable to explore the brain, the symptoms being insufficiently localised to point to any one centre or connected group of centres. The flap was replaced, no attempt being made to restore the bone. A drainage tube was left in the wound in order that if any cerebro-spinal fluid continued to escape it might come away easily. Mr. Battle said that this was evidently a case in which there was probably contusion and laceration of the surface of the brain, in which the continued condition of coma was associated with excessive secretion of cerebro-spinal fluid, and possibly a progressive œdema of the brain in the neighbourhood of the injured portion. The depression of the skull was not regarded as a sufficient cause for the symptoms, the bone was not much depressed, and it extended over a fairly large area.

The result of the operation was very satisfactory, the patient being able to sit up in bed and take a penny with either hand within a week. For two days there was a discharge of cerebro-spinal fluid, and for some days the head was kept somewhat raised, and the child lying on her right side so as to gradually diminish the tendency to overflow from the wound. Mr. Battle said he considered the whole case interesting from the duration of the coma and from the rapidity of improvement after the operation. Bearing on the question of rapidity of recovery he mentioned a case that had been under his care some years ago: A boy who had been operated on for compound comminuted fracture of his frontal bone, suddenly developed coma with left hemiplegia about eight days afterwards. The patient was taken to the operating theatre, and without need for an anæsthetic the right side of the brain was explored in all directions with a trocar and cannula, but no abnormal condition was discovered. It was thought that his state was a hopeless one, but next day he had recovered consciousness and spirits, and when the house surgeon went round in the morning the patient insisted on sitting up in bed and shaking hands with him, and there was no trace of paralysis left, and he left the hospital a short time afterwards perfectly well.

TOTTENHAM HOSPITAL.

Abdominal Hysterotomy for Myoma. — **Dr. A. Giles** operated on a woman, æt. 31, who had been admitted on account of severe hæmorrhage. She had been married eighteen months but had had no children. On admission, the uterus was found considerably enlarged, and a diagnosis of intra-uterine myoma, probably becoming polypoid, was made. It was decided to endeavour to remove the myoma by the vaginal route, and the cervix was accordingly fully dilated. On introducing the finger it was found that the myoma was about the size of an orange and had a wide base of attachment, so that its removal from below would be a matter of great risk and difficulty; accordingly the abdomen was at once opened and a vertical incision was made through the posterior uterine wall; through this opening the myoma was removed, the uterine cavity being opened at the same time. The uterus was then closed in the same way as after a Cæsarean section with a series of interrupted mattress sutures passed deeply through the uterine wall and a continuous suture of fine silk approximating the peritoneal edges. The abdominal wound was then closed in the usual way. Dr. Giles said that the case was one specially suitable to this method of treatment; operation was urgently required on account of the excessive hæmorrhage, and when it was possible to remove the tumour and leave the uterus and appendages practically intact, the operation was an ideal conservative one. When a number of myomata were present, their removal leaving the uterus was a serious matter on account of hæmorrhage, and the mutilated uterus was not really worth leaving. With a single myoma, however, the tumour alone could be removed without additional risk, and a uterus was left that was capable of performing its natural functions; consequently the operation was specially indicated in the case of younger women. Any operation that involved the removal of a myomatous tumour without sacrificing the uterus might be described as a myomectomy; it was, however, convenient to reserve the term abdominal myomectomy for cases in which a subperitoneal pedunculated myoma was removed, an to use the term abdominal enucleation for cases in which a myoma was shelled out of the substance of the uterine walls. In contradistinction to these two procedures the method adopted in the present case, in which the uterine cavity was deliberately opened and a tumour removed from its interior, might be called abdominal hysterotomy for myoma.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 16, 1902.

BARMAIDS AND LEGISLATION.

The humanitarian instincts of the present age are happily to a great extent guided in rational grooves by the teachings of science. This tendency to link together the actions of heart and of head has been shown in no case more conspicuously than in the legislative control of labour, more especially in the case of the unhealthy and dangerous trades. The hours of work have been shortened, the principle of compensation for injury established, and trade processes so modified as to secure a far greater measure of safety to the health and the life of the workpeople. The scope of the Factory and Workshops Acts has been extended by degrees so as to include many trades, but there yet remains a wide margin of preventible trade mischief uncontrolled by the State. For instance, many trades which employ great numbers of workpeople, such as breweries and warehouses, often escape altogether from the control of the Acts on purely technical grounds. By an absurd provision of the Act a workshop is not controlled unless more than forty persons are employed therein, as if one should say that twenty persons might be poisoned but not fifty. Clearly the workers in all trades require protection against insanitary and structurally unsafe premises, against excessive hours of labour, regardless of the numbers who may be brought together under one roof. There are certain classes of labour, chiefly unskilled, which by their nature are extremely difficult to protect, and which are at the same time unable to protect themselves by a trade organisation of their own. As instances may be cited dock labourers, clerks, domestic servants and public-house servants. It is true that dock labourers have plucked up heart of grace of recent years, and by the formation of trade unions have greatly ameliorated their lot as regards pay and hours of labour. Recently Government has included laundry workers within the provisions of the Factory and Workshops Acts. That step recognised the duty of the State to protect the labourers in an occupation that may be called unskilled and is certainly far from wholesome. Laundry workers, before the passing of special factory legislation, were often obliged to work for an excessive number of hours under most insanitary conditions. Now that is all changed, and the metamorphosis makes us more hopeful that a similar meed of protection will be extended to public-house servants. Barmaids have often been called white slaves, and the term is one that in many cases simply registers a stern fact in appropriate language. The hours of work that barmaids are commonly called upon to perform are simply a scandalous reproach to any so-called Christian community. In addition, the food is often bad, no proper meal times are provided, the sleeping accommodation is insanitary, and holidays are practically unknown. It is no wonder that the years of a barmaid's life are short and that only women in the first flush of youth can withstand the strain of one of the most unwholesome of all occupations. Not long ago Glasgow did good service to the nation by calling public attention to the evils of the barmaid's life, both from a moral and a physical point of view. To her honour be it said that Glasgow has put an end to the employment of barmaids save under conditions that bring the occupation within the category of a tolerably wholesome calling. Were legislators to pay more attention to crying abuses going on within the four walls of the United Kingdom there would be no need to unfurl the Imperialist banner and go to the succour of people in far-off climes. We assert that the surroundings of the public-house reduce the occupation of a barmaid under average conditions to a short fitful existence of a few years, which is fatal to health and happiness. A Parliamentary inquiry into the condition of public-house servants generally would be of more practical importance to the innermost vitality of the nation than a score of wars, petty or great, waged in the interests' of comparative or utter strangers. The true Imperialism of the earnest Anglo-Saxon strain concerns itself with the welfare of the people here at home, however humble their lot and however helpless they may be to defend themselves.

THE TREATMENT OF TYPHOID FEVER.

There are certain diseases that seem ever to be in the experimental stage of treatment. An evidence not alone of the restless nature of the physician of to-day, but also of the progress of scientific knowledge. Of this latter class is typhoid fever, a disease which exemplifies in a peculiar manner the prevalent theories of disease. To-day we recognise that it is due to a toxin that shows a marked predilection for the adenoid tissues of the small intestines, as strychnine and other such poisons do for the muscle tissue. In typhoid the toxic products of Eberth's bacillus are as clearly recognised by their effects as are effects of eloterium or pilocarpine. But how does the toxin producing bacillus gain entrance to the body. In the pre-bacteriological days the text-books told of the poisonous vapours of decomposing products absorbed through the pulmonary air-cells. We then found the ground shifted and adapted to meet what was considered the requirements of the discovery of the bacillus. The alimentary canal was discovered to be the site of infection, and the introduction of the bacillus was accounted for by want of proper cleanliness—the soiled apparatus and stained linen not having been removed prior to their being dried up, and as such becoming sources of infection. Withal some physicians were not satisfied with all this explanation, and a diligent search commenced for the primary colony of the germ of the disease, and naturally enough an endeavour to attenuate or destroy it. From these researches Dr. Wasdin concludes that the primary germ colony of disease cannot be considered as occurring in the intestinal canal, but to be normally located in the respiratory tract—a theory which recalls that of the past, and one which in part accounts for the rare case of typhoid in which the clinical symptoms without the normal pathological conditions are not present. According to Dr. Wasdin's report, the bacillus toxin from the blood current gives rise to all the well-known terminal expressions: infection of the intestinal canal, the serous membranes, the bone marrow, and so forth. To reach the affected area in the lung an atomised solution of acetozone is used, and the same drug is given in capsules three times a day. When the temperature threatens to be dangerously high, cold sponging is recommended. The good effect of the treatment is stated to be marked from the first by an increased secretion by the kidneys, a decided lessening of the malodorous character of the stools, and a distinct lessening of the number of the stools, which become sterile. By the combined action of the oral administration of the drug, and its inhalation as an atomised or cloud fluid, the advocates of the therapy claim that they reduce the possibility of gaseous fermentation and its concomitants, hæmorrhage and perforation, and at the same time the destruction of the secondary infection of the canal by the typhoid organism, thereby averting further toxæmia by absorption from the alimentary canal. The germicide is therefore to be directed against both the primary colony in the respiratory tract and the secondary expression in the alimentary canal. The benzoyl-acetyl-peroxide, which has long been known as benzozone, the antiseptic used by Dr. Wasdin, is a non-poisonous product of the aromatic series, prepared from benzoleic acid. The antiseptic and non-poisonous properties of the chemical are well known, and its use in toxæmias can be tentatively recommended. The treatment attacks the disease on an entirely new principle, the theory of which has much to commend it, not the least of which is the innocuous character of the therapeutic agent employed.

MASTOIDITIS.

Sir William Wilde is to-day remembered more as a literary man than as a surgeon. We think of him as the author of the "Valley of the Boyne," whose archæological wealth of information and beauty of description has brought travellers to Meath from every civilised country. Withal he did good work in surgery, and his pamphlet, "Practical Observations on Aural Surgery," was a bold advance in the treatment of mastoiditis and inflammatory diseases of the middle ear. It is almost sixty years since he practised his incision through the compact tissue of the mastoid process and scraped away the carious tissue of the bone, plugging the cavity with lint. The very terms in which he described the operation have an archaic flavour. He was not the first to perform the operation, but he was the first to lay down rules for its performance and to give the symptoms that call for its being done. Riolanus, the surgeon to Henrietta Maria, performed the operation in 1649, some years after Harvey had demonstrated to him the circulation of the blood. But the folio edition of Riolanus gives no idea of the conditions that call for the operation, and his case was little more than a scraping away of diseased bone, without incision of compact osseous tissue. By an accidental syringing of carious disease of the mastoid Valsalva made the important discovery that he could wash out the middle ear from the mastoid cells. Jasser, a surgeon in the service of Frederick the Great of Prussia, made a similar discovery, and continued syringing the ear through the mastoid until he had cleared both the middle ear and the Eustachian tube. J. L. Petit, in his "Maladies des Os," refers to the treatment of mastoiditis, and the operation had a chance of being adopted when Proet had the misfortune in 1791 of exciting meningitis by the operation, and the same year Kolpin, operating on Baron von Beyer, physician to Christian VII., of

Denmark, met with the same misfortune. In this condition of doubt and dread, Wilde found the path of safety and placed the operation on a scientific basis. The operation met with universal approval, and is to-day practised by all aurists either on Wilde's original lines or on modifications of them; and twenty years after the publication of Wilde's case Schwartze published a record of 100 operations with 74 per cent. of successes. The operation became so generally performed that Politzer found it necessary to inculcate caution in its performance, and laid down a series of statements which the aurist should make to the patient and his friends to protect himself from blame should death result. We recall these to memory, for a Cuban medical journal has lately published a case in which, during the curettage of the carious bone the middle fossa of the cranium was opened, and one of the lateral sinuses wounded. The skill of the operator was taxed to the utmost to prevent a fatal issue, in which, however, he happily succeeded. Such accidents are unavoidable, and it is difficult to form an opinion on their probability of occurrence. It may be said that in long-standing disease they are more likely to occur than in others; but it must be borne in mind that the structure of the mastoid process is very different in many subjects. As a rule, the antrum mastoideum is connected with the pneumatic cells of the process by lacunæ, but often enough by only a narrow canal. Indeed, it has been well said that one mastoid process scarcely ever corresponds with another.

Notes on Current Topics.

Zymotic Curves of June.

The vital statistics of London for the month of June furnish abundant material of interest to the sanitarian. Small-pox has fallen steadily in accordance with its usual summer minimum, so that the Asylums hospitals contained only 837 small-pox patients at the end of June, as against 1,526, 1,442, and 1,273 at a corresponding period in the three preceding months. There were 99 deaths from small-pox, compared with 154 in May. With these figures before us it can hardly be hoped that the present outbreak will have exhausted its violence before the coming year brings round the period of its greatest intensity. Scarlet fever cases register the large seasonal intensity. Scarlet fever cases register the large number of 2,439, as against 2,113, 2,176, and 2,222 in preceding months; there were forty-three deaths from this cause. Diphtheria is still rife, and at the end of June 975 patients were under treatment for that disease in the Metropolitan Asylums Board hospitals; fifty-three deaths were due to that malady. The disease is following its usual curve, which places its lowest incidence in May and June; at the end of March the patients under treatment were 1,123; in April, 1,035; and in May, 960. Enteric fever cases, which should be at their minimum in June, showed an increase: 279 cases were notified, and 195 were under hospital treatment at the end of June, as against 121, 115, and 127 at the end of the three preceding months; there were twenty-nine deaths. These figures are far from satisfactory when the exact modern knowledge of the etiology of the disease is taken into consideration. Diarrhœa accounted for fifty-seven deaths, a number more than 100 below the decennial average. This result is gratifying, if we are to accept the view that the amount of diarrhœa forms a delicate register of its general sanitary condition. It is to be hoped that the rate of decrease will be maintained when the disorder attains its period of greatest mortality in the last week of July and the first fortnight of August. The highest numbers of deaths from specific infectious diseases were from the two unnotified maladies—measles, which accounted for 198, and whooping-cough for 151 deaths. The death-rate for the month was 13·9 per 1,000 living, and showed such variations as 6·7 in Hampstead, as against 19·3 in Finsbury and 19·9 in Southwark. Some approach towards equalisation of the death-rates in the constituent boroughs—that is to say, by way of reducing the mortality of poor and unhealthy districts—would speedily render London the envy of the world from a public health point of view.

The Cities of the Future.

In spite of the more general recognition of the importance of avoiding the features which render ancient cities so quaint and so unhygienic, municipal authorities in many instances continue to display a lamentable want of foresight in the laying out of new roads. No more striking example of wasted opportunities could be quoted than the way in which so many of the main roads leading out of London have been deprived for ever of their quasi-rural aspect, by permitting the erection of buildings far in advance of the building line. Thoroughfares that might have been spacious boulevards, have been converted into narrow sordid streets, and this without any corresponding advantage to the public. Dr. Fletcher Little, L.C.C., calls attention to a recent particularly flagrant instance of this want of foresight, a shortcoming which is disappointing on the part of such a progressive body as the London County Council. It is to be hoped that steps will be taken to bring public opinion to bear on this question in view of its important bearing on the future of our great cities.

A Medical Duel Averted.

A motion signed by the deputies of the North of France was recently presented to the French Chamber of Deputies on behalf of the Northern League against tuberculosis, in favour of the model of dispensary established by Dr. Calmette at Lille, which, it is thought, leaves nothing to be desired. Dr. Bonnet, of Paris, who claims priority in the conception of anti-tuberculous dispensaries, took offence at certain passages in this report and actually commissioned his friends, Drs. Muzy and Thibaut, to demand satisfaction of his *confrere* at Lille, who forthwith appointed Drs. Roux and Letulle his seconds.

The four gentlemen, having met and discussed the grounds of the challenge, came to the conclusion that the report contained nothing which could reasonably be construed as offensive to Dr. Bonnet, and there of course the matter ends. In spite of the traditional innocence of French duels the idea of two men, both enthusiastic advocates of a method of saving and prolonging human life, engaging in mortal combat is as incongruous as it is ridiculous. Incidentally the episode illustrates the foolish mania for priority which characterises many otherwise estimable and certainly talented persons. *Eh mon Dieu !* what does it matter who invented the thing if only it afford some protection against this most terrible of maladies? We trust these gentlemen will henceforth stand shoulder to shoulder as soldiers in the war against our invisible enemies, leaving quibbles such as these to occupy the attention of their intellectual inferiors.

The Diet in Advanced Life.

Theoretical considerations suggest, and practical experience confirms, the view that each decade of life has its special dietetic conditions. The infant organism cannot maintain itself in health on a diet which responds to the requirements of the adult, and it is equally certain that, with the advance of years modifications of the adult dietary are necessary if certain morbid contingencies are to be avoided. The elderly man automatically reduces his output of energy, and his tissues no longer utilise more than a limited amount of nutriment; consequently, if he maintains his dietary at the adult standard, there must result a disturbance of that physiological equilibrium which constitutes health at all ages. This principle, of course, does not preclude the liberal nourishment of the aged under special circumstances, but it entails the recognition of the axiom that the aged require less food than persons in the active period of adult life. Moreover, the diet of those advanced in years often requires to be considered not so much from the point of view of the amount that would be theoretically good for them, but of the possibility of their assimilating it. The wear and tear of life may have reduced the functional activity of their viscera so that they have become unequal to the digestion and assimilation even of the amount of food which normally they ought to take, and the measure of a healthy diet will have to be based on the functional activity of their organs; in other words, the limitation of food, though always necessary in the aged, will vary according to individual conditions.

Hansom Cab Reform.

The regrettable accident of which the Right Hon. Joseph Chamberlain was recently the victim may conceivably have for result to direct the ingenuity of inventors towards the designing of a vehicle which shall present the advantages of the present popular conveyance without its drawbacks—which are several and serious. Apart from the difficulty of entering a cab without appropriating some of the mud from the wheel, there is the *quasi*-certainty of being thrown on to the splash board or on to the road when, as so often happens, the horse stumbles or slips on the greasy asphalt or the slippery tram lines, rendered artificially dangerous by the frequent application of water to their polished surfaces. Then, too, there is the partial asphyxia which is speedily induced in rainy weather when the glass front is lowered, though this might easily be remedied by leaving a louvred opening in the side windows. Lastly, there is the really terrible risk of being thrown violently against, or through, the glass front in the event of the horse falling down, and this risk is the greater seeing that the rain which renders the protection necessary also tends to diminish the horse's foothold on the pavement. A Minister's life would not have been sacrificed in vain if his death by accident led to this much-needed reform, but we nevertheless congratulate ourselves and Mr. Chamberlain on the fact that his life has not been sacrificed on the altar of vehicular convenience.

Ethnology of Early Egypt.

The Edwards Professor of Egyptology in University College, who has been long and brilliantly enlightening the public in one of the most interesting and fascinating branches of human knowledge, unfolded a new vein recently in a paper which discusses the "Races of Early Egypt." Professor Petrie discusses the question from the new standing-ground offered by the discoveries of the past few years, in bringing to light the long-buried monuments of that very old civilisation. The learned writer discusses the physiognomy, craniology, anthropology, &c., of the portraiture of the early Egyptian, as so firmly depicted in their (approximately) imperishable lithic remains. Weapons, dress, hirsute decorations, &c., are also laid under contribution for items of knowledge. In opening the discussion of his materials, he points out and corrects one of the very common mistakes of the imperfectly educated reader. We must disabuse our minds of the prevalent feeling that stepping back a few thousand years will lead us to a simpler condition of races, and that at the present beginning of our information we deal with "purer" races than those around us in the present day. On the contrary, before man was tied down to the permanent possession of domestication and agriculture, he probably roamed and mingled more widely than in historic times. We must expect to deal with mixture of origin as much in 5000 B.C. as in 1900 A.D. He arranges his types of cranio-facial specimens of old Egyptian portraiture under seven heads: (1) The aquiline type, (2) the plaited-beard type, (3) the pointed-nose type, (4) the tilted-nose type, (5) the forward-beard type, (6) the straight-bridged type, (7) includes some examples of the mixed race of the Fourth Dynasty. Both in physiognomy and decoration Professor Petrie recognises a strong resemblance between the prehistoric Egyptian and the present Kabyle of Algiers.

Vegetarianism and Sunstroke.

LIKE most other eccentric cults, that of vegetarianism rests rather upon the emotions than upon the reasoning powers. An amusing instance of lack of logic on the part of a zealous disciple of that school has lately been published in one of the London daily newspapers. The correspondent in question, good, easy man, told the story of how for many hours he braved the heat of a midsummer sun without any covering to his head. The subsequent immunity from sunstroke he attributed to the fact of the coolness and purity of his blood, which was derived from strictly vegetable sources. If meat eating were the great predisposing factor in sunstroke, then a vast proportion of mankind would be laid low by the rays of the sun. Vegetarians, like teetotallers, usually try to prove too much. No one will dispute the fact that a man can live without eating flesh or drinking alcohol. On the other hand, many men who are moderate consumers both of meat and of alcohol live to a hundred years or more. So far as we know no one has ever yet proved that total abstainers either from flesh or from strong drink live on the average longer than the average Philistine who does not shun the flesh pots and the wine jars. Length of life is, on the whole, a pretty fair criterion of the harmlessness or otherwise of any habitual article of diet. Of course, as every medical man knows nowadays "sunstroke" is due to a specific microbial infection. The rash vegetarian who jumped at his conclusion anent that malady is not an uncommon type of witless reasoner where medical matters are concerned. Hence the prosperity of modern quacks and quackery.

Cider as a Summer Beverage.

THE wholesomeness of cider is fairly well accepted among medical men, at any rate among that tolerably large majority of the profession which does not fix the stamp of disapproval upon the moderate consumption of alcoholic liquors. Like beer, cider varies greatly in its flavours and in its alcoholic strength. The sweet ciders of Hereford, Norfolk and Worcestershire stand out in strong contrast from the rough, strong and somewhat acrid ciders of Somerset and Dorset. When properly fined and made from ripe fruit of choice stock, dry, sparkling cider is, in the opinion of not a few connoisseurs, almost equal to the choicest brands of champagne in flavour and vastly less detrimental to health. It has a decided advantage over the vineyard wine in point of cost, as cider is a comparatively cheap beverage. Moreover, it is not, like beer and champagne, bad for gouty persons. The malic acid of cider, indeed, is said to exercise a solvent action upon uric acid, and whether that be the case or not, cider certainly does not appear to produce gout in those who habitually drink it. Cider is, speaking generally, a lighter drink than ale, and is better adapted for use in summer weather. It is mildly laxative, and this is of importance. When skilfully mixed there can be no finer cup than that made with cider and soda-water, flavoured with lemon and a pinch of spice, fortified with a dash of liqueur, sweetened with a little sugar, cooled with ice, and garnished with a slice of cucumber and a sprig of borage. With such a reminiscence in mind it is comforting to hear that of late years a great revival has taken place in the cider-making industries of England.

Post-Graduate Instruction.

THE number of the New York *Medical Record* for June 21st contains an excellent synopsis of the facilities for post-graduate instruction provided in the principal European countries and in the United States, the compilation whereof must have required much trouble. We gather that, except in one respect, the post-graduate institutions of the United States are to be regarded as unsurpassed, the exception being instruction in tropical diseases, a subject in which Americans are as closely interested as we are ourselves. No doubt this lapsus will shortly be remedied, and then medical men from over the ocean will be enabled to obtain such instruction as they require at home without undertaking expensive journeys to one or other of the capitals of Europe. The merit of first organising post-graduate instruction belongs to the States, no doubt because the perfunctory training exacted of their students at many transatlantic medical schools leaves so many gaps to be filled in after life. It says much for the conscientiousness of the American neo-practitioner that he recognises his shortcomings and does his best to make them good. It is gradually dawning on practitioners on this side that they too have not learned all that there is to be known during the brief period covered by the curriculum, and a healthy stimulus has thus been given to further study, which is finding expression in the multiplication of post-graduate centres.

Alleged Ill-Treatment of an Asylum Patient.

AN abortive prosecution by the Commissioners in Lunacy was recently heard before the Carmarthen borough magistrates, in which a young woman, formerly a nurse at the Joint Counties Asylum, was charged with ill-treating a patient by striking her with a broom. Dr. Alice Johnson, assistant medical officer at the asylum, the principal witness in the case, stated that she went into the dormitory, in which there were over fifty patients, and saw the nurse in question striking the patient, who was in bed covered with bedclothes, across the legs with a broom; on remonstrating with her, she replied that she had no intention of hurting the patient, but simply intended to frighten her because she was very noisy, and making the other patients restless. Dr. Johnson also stated that the blows were delivered with no force whatever, and that she afterwards examined the patient three times and found no marks on her. On the case being reported to Dr. Goodall, the medical superintendent, he informed the nurse that it was necessary in the interests of the discipline of the institution that she should leave, and that he would have to discharge her summarily. He also told her that he was aware of her good conduct and previous good record; that he was sorry for what had occurred. He reported the dismissal to the Lunacy Commissioners in the usual course, and expressed to them his opinion that it was not a case for prosecution, but notwithstanding they instituted those proceedings. It seems hard to realise why, for there is really no evidence of ill-treatment, although we strongly disapprove her novel method of repression; she had been eleven months in the asylum, was kind and considerate to the patients, and we think the punishment meted out to her by the superintendent was sufficient for her indiscretion. Dr. Goodall was certainly in the best position to measure out the punishment which fitted the crime, and, whilst admitting the humane feelings which prompted the Commissioners, we regret such an action should have been brought, and are glad the Bench dismissed the charge without retiring.

A Would-be Royal Cinematographist.

The Paris *Figaro* relates an amusing (and probably apocryphal) story concerning an enterprising cinematographist who is stated to have gone to Buckingham Palace as soon as the imminence of an operation became known, for the purpose of photographing the various steps of the operation. The surgeons were taken by surprise and took him for a lunatic, but as he was fortified with excellent credentials, backed by a well-known name, they condescended to explain to him that such a proceeding *a la Doyen* was quite inadmissible in this country. Nothing daunted, the applicant offered to be satisfied if the surgeons would go through the similitude of the operation on one of his assistants, the *mise en scène* being suitably arranged, offering at the same time what he considered ample remuneration. At the mention of remuneration the surgeons took umbrage and had the intruder expelled. There are too many elements of improbability in this *racontar* for us to accord it the slightest credence, but it is, after all, not one whit more absurd than many of the rumours which have passed current for news during the last fortnight.

Hydramnios Diagnosed as Ovarian Cyst.

A woman was recently sent into a metropolitan hospital for the removal of a large ovarian cyst. The possibility of pregnancy was excluded by the general practitioner under whose care the patient had been, and the symptoms generally pointed strongly in favour of his diagnosis. Operative measures having been decided upon, the cyst was exposed by an abdominal incision and a large quantity of watery fluid withdrawn by the aid of a trocar. On enlarging the incision a small six-months' fœtus presented at the aperture, and another was found lying within the much-dilated uterus, for such it turned out to be. The result was somewhat disconcerting, but the wound in the uterine wall was sutured and the abdominal wound closed, and the patient is progressing favourably. This case, which will, no doubt, be published in full later on, is highly instructive, as showing how extremely difficult the differential diagnosis of ovarian cyst and hydramniotic pregnancy sometimes is.

Repeating Prescriptions.

An inquest in Margate by the borough coroner on the body of an inebriate brings forcibly before the medical profession and the public the dangers of repeating prescriptions. The last victim was a man, æt. 41, who, on Sunday, the 15th ult., drank a sleeping draught of bromine, chloral, and morphia, and died in his sleep. Two years previously he had been attended for incipient delirium tremens, and his medical attendant took the precaution of administering each dose of the medicine himself, until it took effect and then brought away the remainder of the mixture. This time the poor inebriate took the prescription to a pharmaceutical chemist and had it compounded, and took too much of it and died. The compounder was quite within his legal right in preparing the two-year-old prescription; but he certainly would have shown more consideration for both his customer and the prescriber if he declined to compound a two-year-old prescription containing a large number of big doses of such powerful and lethal drugs as morphia and chloral until he had consulted the prescriber. In our experience such has been the rule in first-class compounding houses. Withal the fact remains that a pharmaceutical chemist may compound any prescription as often as the patient brings it, or for that matter for any person who brings it. The majority of our readers know that prescriptions are lent about freely, and there is no trouble in getting them filled. We look on this state of affairs as a public danger, one which, however, the prescriber can remedy to a certain extent by writing across his prescription the words, "this prescription is not to be repeated." If so marked it cannot be repeated legally, and if any unpleasant effect resulted from its repetition the compounder would find himself in an awkward predicament. We, however, think that the Council of the Pharmaceutical Society might bring before their members and the holders of their licences the advisability of not repeating old prescriptions containing abnormal doses of lethal drugs, and pharmaceutical chemists might bring before physicians the necessity for marking on all unusual prescriptions for highly toxic remedies "not to be repeated."

The Sterilisation of Salads.

The consumption of uncooked vegetables and fruit undoubtedly entails a risk of typhoid and other infections *via* the stomach, and on several occasions epidemics of diarrhœa, cholera, and enteric fever have been traced to particular deliveries of food stuffs of this class. An Italian observer points out that spraying with a 2 per cent. aqueous solution of tartaric acid is rapidly fatal to most pathogenic micro-organisms including that of Asiatic cholera. Immersion of raw vegetables in a 3 per cent. solution of the acid was shown experimentally to completely sterilise artificially infected vegetables without injuriously affecting their taste, provided of course that they are thoroughly washed before being eaten. The suggestion may prove of value, although it does not afford any protection against germs contained within the sap vessels of the plant as, for instance, in plants grown on sewage farms. The plant structures, it is true, ultimately destroy pathogenic and other bacilli, but this process of vital sterilisation does not take place until assimilation is far advanced, consequently the stem may contain large numbers of undigested, and therefore still active, bacilli. This risk may be minimised by discarding the stems when preparing salads, but nothing short of boiling can be relied upon to provide absolute safety against infection. The moral is that in epidemic seasons and countries the use of uncooked vegetables should be avoided, though an exception may be made in favour of raw fruit which is not undergoing decomposition, provided that it be carefully washed in pure water.

Cancer of the Appendix.

At the recent meeting of the American Medical Association, Dr. Harte, of Philadelphia, brought forward the subject of cancer of the vermiform appendix, of which two cases had come under his own observation, both, curiously enough, in persons about 25 years of age. The history is that of an ordinary recurring appendicitis, and the diagnosis of malignancy can hardly be made without an exploratory incision. He surmised that the occurrence of malignant neoplasms in this situation is more frequent than is usually supposed, basing his conclusion on the fact that the more careful examination of removed appendices during the last few years has resulted in a considerable addition to the number of such cases on record. Several others were reported by those who joined in the discussion on the paper, including one case in a woman of 40 and another in a man of 80. On the other hand, Dr. Matas, of New Orleans, stated that he had never met with an instance of cancer of the appendix in a thousand cases carefully examined by him when demonstrator of anatomy (1885 to 1895). Inasmuch as the existence of a chronic irritation or inflammation of tissues is known to favour the subsequent development of malignant growth, it may be assumed that the appendix, so commonly the seat of the predisposing irritation, would be more exposed to take on cancerous degeneration than certain other important anatomical structures.

The Pathological Significance of Psoriasis.

Psoriasis is a common disease of the skin, but in reality we know very little concerning its etiology and pathological significance. In the last number of the *Polyclinic* an appeal is made to practitioners to follow up the history of their cases of psoriasis in order to discover what becomes of them, that is to say, whether they live to old age, or are liable to intercurrent diseases which shorten life, with special reference to cancer. There is more in this note of interrogation than meets the eye, for underlying it is a manifest desire to elicit another argument in favour of the view that arsenic is a predisposing cause of cancer. It must be admitted that if it could be shown that psoriasis was followed by cancer in an exceptional proportion of the cases there would be some ground for incriminating the administration of arsenic, since virtually all such patients, at some time or another, undergo a course of treatment by arsenic, often for long periods. Unfortunately the counter-demonstration, *e.g.*, the proof that psoriasis is not followed by cancer in more than normal proportion in the absence of any arsenical treatment, must be almost impossible to obtain, at any rate until this reiterated suggestion of the malignant action of arsenic has had time to create a prejudice against the drug in the minds of the public. Perhaps Mr. Hutchinson may be able to tell us whether workers in arsenic figure unduly on the cancer roll and why cancer has increased since the disfranchisement of arsenicated wall papers, once so common.

Phthisis in the Metropolis,

In the recently issued returns of the Registrar-General for 1901 it is shown that phthisis was the assigned cause of 7,735 deaths in London last year, against a corrected annual average of 8,291 deaths in the ten years 1891-1900. The phthisis death-rate was equal to 1·71 per 1,000 as compared with 1·90 and 1·79 in the two preceding years. But in the case of several of the metropolitan boroughs it is necessary to carefully distribute the institution deaths from phthisis, in order to arrive at a fairly reliable measure of local mortality from that disease. Thus, for example, in Kensington, which borough contains the St. Marylebone Infirmary and a part of the Brompton Consumptive Hospital, 426 deaths from phthisis were registered during the year, but it was found, after distribution of institution deaths, that only 241 deaths from phthisis properly belonged to Kensington; the death-rate in this borough from phthisis was thus reduced from 2·42 per 1,000 to 1.37. Last year, after proper distribution, the phthisis death-rates in the metropolitan boroughs ranged from 0·90 per 1,000 in Lewisham, 0·91 in Hampstead, and 1·10 in Paddington to 2·29 in the City of London, 2·51 in Southwark, and 2·81 in Holborn.

Is a Disregistered Man a Medical Practitioner?

The other day we had occasion to refer to the case of a man in the provinces holding an American medical diploma, but of course unregistered, who was fined for non-compliance with the compulsory notification of infectious diseases law, and we commented on the anomaly of his being proceeded against for failing to discharge a duty imposed presumably only upon qualified and registered medical practitioners. Mr. Thomas Richard Allinson, ex-L.R.C.P., has raised the question afresh, and was fined last week for failing to notify two cases of small-pox. Mr. Allinson frankly admitted that he omitted to notify simply in order that the sufferers should not be removed to hospital, thereby greatly aggravating any offence that he may have committed. But Mr. Allinson, in the eyes of the law, is no longer a medical practitioner, and under these circumstances it is difficult to understand how he can be brought under the penal clauses of the Act. The head of the family is the proper person to be proceeded against, and in this instance we are pleased to see that he also was sentenced to a fine, small in amount it is true, but still a fine. These occurrences give prominence to the chaotic state of the legislation regulating the practice of medicine in this country. The law as it stands affords the public absolutely no protection against ignorance or quackery, and the fact of a man's having been struck off the *Register* does not appear to entail any particular drawback or to confer any corresponding immunity.

Lachnanthes Tinctoria.

Dr. Latham, of Cambridge, is pursuing his wild-goose chase after the merits of the drug which, on far too slender grounds, has been prerecognised as a remedy for consumption by Mr. Alabone. He finds that it is a powerful drug, in the sense that in small doses it kills guinea-pigs, death being preceded by paralysis of the extremities. This information, however, is *ultra vires*, since the slaughter of guinea-pigs is not the reason for which it has been so mightily boomed, and there are many simpler ways of relieving these small rodents of the *tædium vitæ*. Incidentally it is stated that lachnanthes does not delay, but rather hastens, the fatal termination of tuberculosis in animals. We are promised further investigations of a more purely therapeutical kind, and there is no obvious objection to their being made except that they tend to encourage the hope that consumption is a disease that may be cured by drugs, which is an hypothesis at variance with all we know of this dread malady. We cannot help thinking that Dr. Latham might have more usefully occupied his leisure than in an investigation foredoomed to failure, unless, indeed, success is to be measured by the certainty with which the worthlessness of the drug is demonstrated.

Small-pox at Swansea.

There can be no longer any doubt that the outbreak of small-pox has reached dangerous dimensions. On July 12th the Lord Chancellor took the extreme step of transferring the forthcoming county assize from Swansea to Cardiff. That decision was communicated to the Under-Sheriff of Glamorganshire by Justices Ridley and Jelf. This state of affairs in a crowded centre of population in South Wales cannot be regarded otherwise than in the light of a great calamity. It is the more alarming inasmuch as the present month should register the minimum of an outbreak of small-pox. It may be safely concluded that the Lord Chancellor would not have dislocated the local assize system except under great pressure.

The Samaritan Free Hospital and Dr. Shaw-Mackenzie.

The New York *Medical Record* for June 28th contains a very fair and damning summary of the proceedings in virtue of which Dr. Shaw-Mackenzie, having been elected to a post on the staff of the Samaritan Free Hospital, was subsequently displaced, in violation of the most elementary rules of justice and fair dealing. The circumstances, which we need not recapitulate, reflect discredit upon the management of the institution in question, and incidentally upon the medical staff, who deliberately placed an honourable gentleman in a most painful position without the shadow of a reason, professional or social, to justify their conduct. We agree with our contemporary that "it is outrageous that a man's good name and reputation should be exposed to the accident of a vote or to the rallying of supporters of another candidate, and that he should be involved in litigation through the fault of the Committee." Such a case is fortunately unparalleled in the annals of hospital government.

PERSONAL.

Dr. Karl Gussenbauer, Professor of Surgical Pathology in the University of Vienna, has been elected Rector Magnificus for the ensuing academic year.

Professor Frank Billings, M.S., M.D., Professor of Medicine and Dean of the Faculty of Rush Medical College, has been elected President of the American Medical Association.

Sir W. T. Thiselton-Dyer, K.C.M.G., F.R.S., is the first President of the new Pharmacological Society which is to meet in the premises of the Society of Apothecaries, and which already numbers some fifty members.

Sir Frederick Treves on being made a baronet will be described as "Sir Frederick Treves of Dorchester," and Sir Francis Laking as "of Kensington," the reason being the desirability of avoiding confusion with possible baronets bearing similar names.

Professor Fournier, having attained the age limit, has resigned the Chair of Clinical Medicine at the Faculty of Medicine of Paris, which he has occupied for the last twenty-two years, and Professor Gaucher has been elected by the Faculty to succeed him, subject to the approval of the Minister of Public Education.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

BELFAST.

Presentation to Dr. John Campbell, F.R.C.S.—On Monday, July 7th, an afternoon reception was held at the Samaritan Hospital, Belfast, when a large number of guests—including the leading medical men of the city—accepted the invitation of the Committee to be present. The object of the gathering was to witness a presentation to Dr. Campbell on the occasion of his marriage to Dr. Emily Fitzsimons, of Tralee, co. Kerry. The presentation took the form of a solid silver tea and coffee service and salver, which latter bore the following inscription:—"Presented, on the occasion of his marriage, to John Campbell, M.D., F.R.C.S.Eng., with a silver tea and coffee service, by the Committee, matron, and nurses of the Samaritan Hospital as a token of gratitude for his unfailing kindness and attention. June 25th, 1902." Sir James Musgrave, Bart., occupied the chair, and the address was read by Miss Florence Henderson, Hon. Sec. of the Ladies' Committee. The Lady Mayoress (Lady Dixon) made the presentation, and after Dr. Campbell's reply, Sir Wm. Whitla spoke, testifying to the universal esteem and respect in which Dr. Campbell is held by the medical profession.

THE SMALL-POX EPIDEMIC.—We seem to have got rid of this trouble, for the present at any rate, as no new cases have appeared for about a month now. The net result of the scare has been an enormous increase in vaccination and revaccination, and the erection of a small-pox hospital at Purdysburn, about five miles from the centre of the town, and some 200 yards from Purdysburn Lunatic Asylum. This is near the site on which the permanent fever hospital for the town is to be erected, and is to serve as a temporary small-pox hospital till that is ready. The new structure is of corrugated iron, on a foundation of brick and cement. It has four main wards, each to accommodate eight patients, with kitchens, bathrooms with hot and cold water, &c.—all connected by a long covered passage with an administrative block, where doctors and nurses' rooms are situated. There are also wash-houses and a small destructor, so the whole arrangements seem complete. It was erected in less than three weeks, and nothing remains but for the happy ratepayers to pay the bill, which unfortunately cannot, in the present defective state of the law, be charged to the anti-vaccinationists.

Obituary.

JOHN CURNOW, M.D.LOND., F.R.C.P.

WE regret to have to announce the death of Dr. John Curnow, of Wimpole Street. Dr. Curnow was born at Towednack, near St. Ives, Cornwall, on January 26th, 1846, and was educated at Penzance and at Bath. He matriculated at King's College, London, in October, 1864; he became a member of the Royal College of Surgeons of England in 1868, and obtained his degree of Doctor of Medicine of the University of London in Nov. 1871. He was appointed house physician at King's College Hospital in 1869, at which hospital he was demonstrator of anatomy till 1870. He was appointed Gulstonian Lecturer of the Royal College of Physicians in 1879, and has held the post of Professor of Clinical Medicine at King's College since 1896. He was long associated with the editorial staff of the *Lancet*, and was the author of several important articles in Quain's "Dictionary of Medicine."

SENOR D. MATIAS NIETO SERRANO, MARQUES DE GUADALERZAS (Editor of *El Siglo Médico*).

IT is with regret that we announce the death of Señor Serrano, Marques de Guadalerzas, editor of *El Siglo Médico*, the doyen of the medical profession in Spain. He was a member of the Royal Academy of Medicine, and President of the Psyco biological Society of Spain. He was born on February 24th, 1813, and died on Thursday, July 3rd, 1902, at the ripe age of eighty-nine years. Of him, Don Decio Carlan writes:—He was a typically great man—virtuous, prudent, thoughtful, proud of his race, dear to his friends, and an honour to his family. He obtained many honours for his services to science and his country. For his services as a military surgeon he was awarded the Cross of Isabella the Catholic and the Cross of Charles III. By examination he became a Fellow of the Royal Academy of Medicine in 1839, and in 1861 was elected permanent secretary. After he retired from the military service he obtained the Grand Cross of Maria Christina and the Grand Cross of Isabella the Catholic. In 1875 he was elected as one of the Council of Instruction, and soon afterwards elected President of the Section of Surgery. He presided over the first Medical Congress held in Madrid in 1868, and finally was created Marques de Guadalerzas by the Queen Regent.

He wrote a good many medical articles, and of these the most interesting were his medical reminiscences which appeared in *El Siglo Médico* under the title "Vejeces."

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

RETRO-PERITONEAL FATTY TUMOUR.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—There is an error in your report of the July meeting of the Obstetrical Society of London (THE MEDICAL PRESS AND CIRCULAR, July 9th, p. 35). In the paragraph on my specimen it is stated that "on the right side it was intimately connected with the kidney, which occupied a pelvic position, *and was removed with the tumour.*" I took care not to disturb the kidney, as there was no reason whatever why it should be removed, and I could not find any left kidney. I specially dwelt on the fact that lipomas of the omentum and lipomas of the uterine broad ligament are only pathologically retro-peritoneal, and can be removed with relative ease and safety, whilst large lipomas, like my specimen, behind the mesentery and posterior parietal peritoneum, are very dangerous to extirpate. In reply to Dr. Giles, I observed that retro-peritoneal tumours were possibly associated with some teratological condition of the kidney. In my case the right kidney lay on the brim of the pelvis, its vessels apparently arising from the common iliacs. In Billroth's case of fibroma of the broad ligament (No. 7 in my "Table of Cases of Fibroma of the Broad Ligament," "Trans. Obstet Soc." London, Vol. XLI., 1899, p. 188), an essentially retro-peritoneal form of growth, the left kidney and suprarenal capsule lay in the pelvis, and were removed with the tumour.

I am, Sir, yours truly,
ALBAN DORAN.

BAKEHOUSE LEGISLATION.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In reading your valuable and interesting leader on "Bakehouse Legislation" (THE MEDICAL PRESS AND CIRCULAR, July 2nd), I observe the following paragraph:—"The key to the public health aspects of the case was given by Drs. Waldo and Walsh a few years ago, when they demonstrated that the interior of a loaf was not necessarily sterilised by baking." May I venture to point out that Drs. Waldo and Walsh demonstrated nothing of the sort, and, indeed, demonstrated nothing at all. I have seen these statements repeated over and over again in various daily and weekly papers, and one gets very tired of the repeated iteration of the thing that is not. But, after all, one does not expect the writers in the ordinary daily papers to concern themselves much about the validity of arguments or the nature of proof. In scientific journals, however, one has a right to expect something nearer approaching to scientific accuracy. One has only to read this much-quoted pamphlet of Drs. Waldo and Walsh to see that their experiments were entirely inconclusive. They simply showed that certain non-pathogenic germs were found in newly-baked bread. No attempt whatever was made to show that those germs had previously existed in the dough before it was baked. If the dough had been inoculated with certain germs, and if some of these germs could afterwards be traced in the newly-baked bread, there would have been something nearly approaching to the demonstration. But nothing of this sort was done, and the accepted belief that the temperature of the baker's oven is enough to sterilise dough is entirely unshaken by anything that Drs. Waldo and Walsh did.

It may further be pointed out that bread has, from time immemorial, been baked under the most insanitary conditions, particularly, as your leader indicates, in India, and yet there has never been any epidemic of any kind that can be properly traced to the consumption of such bread. These considerations will lead to the conclusion that bakehouse sanitation is not "vital to the welfare of the community at large," though it is undoubtedly of the utmost importance in the interests of the bakers' journeymen. That is the real and quite sufficient ground for a vigorous call for reform.

I am, Sir, yours truly,
Editor, The "Baker and Confectioner."
61, Chancery Lane, London,
July 10th, 1902.

[The experiments, in our opinion, were both logical and conclusive. They showed that bread taken from the centre of a newly-baked loaf—of course under careful precautions to prevent contamination by outside microbes—contained living germs. Surely that demonstrates the fact "that the interior of a loaf was not sterilised by baking." If the loaf had been sterilised throughout no micro-organisms could have been cultivated from the bread removed from the centre of the loaf. The loaf was not sterilised by baking, therefore organisms could be cultivated from it. The organisms were in the dough; where else could they have come from? The conditions of life of pathogenic or non-pathogenic bacteria are similar. Hence it is reasonable to assume that if non-pathogenic germs survive baking pathogenic germs will do likewise. The danger arises from the sort of microbes to which the flour and dough are exposed in the insanitary bakehouse. We consider from a scientific point of view Drs. Waldo and Walsh proved their case up to the hilt.—Editor, Medical Press and Circular.]

Literature.

CLINICAL LECTURES ON HYDATID DISEASE OF THE LUNGS. (*a*)

This excellent monograph is the outcome of a series of lectures delivered at the Adelaide Children's Hospital. Hydatid disease of the lung is by no means common in this country and is one of the rarest of pulmonary affections. It is well, therefore, that Dr. Lendon should have availed himself of the opportunities which clinical study in Australia affords of furnishing the profession with a concise, practical and yet thoroughly scientific presentation of the subject. It is intended for students and practitioners, and by its style, arrangement, and clear instructions should prove of much service to medical men practising in the Commonwealth and may be read with interest and profit even by practitioners in this conservative country.

In ordinary text-books but little space is given to hydatid disease of the lungs, and, as it is long since the works of Dr. Dougan Bird and Dr. Davies Thomas appeared, Dr. Lendon's monograph is particularly welcome.

The author conveniently deals with his subject as it presents clinically in various stages. First, the unruptured cyst is considered; the period of latency is marked by an absence of symptoms or by indecisive symptoms, and may even end in retrogression; usually, however, marked physical signs sooner or later give rise to the suspicion that hydatid disease exists. When rupture of the cyst occurs death may follow rapidly from the flooding of the lungs with fluid, or suffocation may result from blocking of the larynx with a piece of hydatid membrane or with a daughter cyst. The rupture of the cyst may be followed by a period of quiescence, the cyst becoming obsolescent, or there may be expectoration of the mother cyst, or sepsis may occur. But even when expulsion of the hydatid membrane has been accomplished it must not be forgotten that there still remains the empty lung cavity which must be dealt with.

Dr. Lendon's work is rendered peculiarly valuable by the faithful record of cases which have come under his observation. His suggestions for treatment are sound, and, while full of common-sense, are based on well-ascertained pathological and clinical data. Not only are intra-pulmonary cysts fully dealt with, but the question of cysts in the pleural cavity is considered, and a short section is devoted to the subject of the invasion of the thorax by cysts of abdominal origin.

The subject is in many ways special, and we regret that it is impossible, in the short space at our disposal, to give any adequate idea of the ground covered by Dr. Lendon, but we have no hesitation in recommending the work to our Australian *confrères;* and, at a time when the interests of one part of the Empire should be considered the interests of all, we commend this modest little work to the profession generally.

THOMSON ON ACUTE DILATATION OF THE STOMACH. (*a*).

This short monograph has grown out of a paper read before the Royal Medical and Chirurgical Society. It is a concise and practical summary of the chief characteristics of acute gastrectasis. The histories of five cases are given at length, and useful summaries of thirty-nine others collected from medical literature. With these as a basis the subject is ably discussed, and, although Dr. Thomson has not succeeded in throwing any new light on the perplexities which surround the pathology of acute dilatation of the stomach, he has nevertheless furnished one of the best presentations of what is thought and known.

His division, although arbitrary, is suggestive. He arranges the already recorded cases into five groups: those in which the dilatation occurred without any apparent cause, and in which after death no other lesion was found; those in which after death some definite lesion has been found; those in which the dilatation has followed some surgical operation, and in which, after death, no other lesion has been found; those in which dilatation has apparently followed some indiscretion in diet; and those in which dilatation has followed an injury.

The symptoms and physical signs are briefly presented, and the post-mortem appearances are well illustrated by photographs. The longest and most valuable section of the work is devoted to a discussion of the pathology, which, we fear, must still be left in much obscurity. The suggestions regarding treatment are short but sensible.

The whole monograph is worthy of careful perusal and will be of service as affording a convenient source for reference; but why did not the author complete his book by supplying a bibliography and an index?

THE MILROY LECTURES. (*b*)

This interesting volume really consists of three parts—the Milroy Lectures for 1899, various addresses delivered before the Royal Medical and Chirurgical Society, and several essays on hygienic matters.

Dr. Vivian Poore is a firm believer in the wisdom of

(*a*) "Clinical Lectures on Hydatid Disease of the Lungs." By Alfred Austin Lendon, M.D., Lecturer on Obstetrics and Clinical Lecturer on Diseases of Children in the University of Adelaide, &c. Pp. 122, with 3 Plates and 14 Figures. London: Baillière, Tindall and Cox. 1902. Price 5s.

(*a*) "Acute Dilatation of the Stomach." By H. Campbell Thomson, M.D., M.R.C.P., Assistant Physician to the Middlesex Hospital; Medical Tutor in the Medical School. Pp. 54, with four figures. London: Baillière, Tindall and Cox. 1902. Price 3s.

(*b*) "The Earth in Relation to the Preservation and Destruction of Contagia: being the Milroy Lectures delivered at the Royal College of Physicians in 1899, together with other Papers on Sanitation." By George Vivian Poore, M.D., F.R.C.P., Professor of the Principles and Practice of Medicine, University College, London, Physician to University College Hospital, &c. Pp. 257, with 13 Illustrations. London: Longmans, Green and Co. 1902.

the old saying: "The rain to the river, the sewage to the soil." He contends that the dangers of applying dung to the soil are as nothing in comparison with its advantages. He finds no evidence that contagia spread in the soil. "To live in filth and to inhale the products of putrefaction given off from privies, or pails of fæces or sodden ground, results in disease, but there is no evidence whatever that disease thus generated is able to spread through the soil and infect a neighbouring house or street." On financial as well as hygienic grounds Dr. Poore would advocate a "return to the soil." He certainly shows that our present methods are wasteful and unnatural and lead to municipal and national impoverishment. The sections dealing with the relation of the soil to such diseases as tetanus, anthrax, dysentery, cholera, malaria, typhoid and other infectious diseases are somewhat superficial and too meagre in new facts to prove of much service. His sections, however, on practical considerations, the maintenance of the fertility of the air, and the relations of the agriculturist to the sanitarian are full of interest and rich in suggestion. The description of sanitation in Holland is particularly attractive, and the account of the reclamation of Carrington Moss is of great interest. But perhaps the most attractive pages of all are those in which Dr. Poore lets us into the secrets of his own delightful experimental garden at Andover.

The addresses delivered before the Royal Medico-Chirurgical Society are all worthy of being preserved within the covers of this book. They deal with such matters as typhoid fever caused by pollution of public water supplies, the protection of water supplies, application of excreta to well-tilled humus, and the relation of enteric fever to overcrowding. The study of the causation of typhoid by pollution of public water supplies, with its record of forty-six instances occurring between 1867 and 1897, should be of much service to the sanitarian. Dr. Poore maintains that under no circumstances whatever should enteric excreta be mixed with water. He holds that the great cause of the increase and wide epidemicity of enteric fever in modern times has been the water-closet.

Among the general essays here reprinted from various periodicals are those dealing with the sanitation of camps, milk and its relation to health and disease, and dietetic problems.

Dr. Vivian Poore has been well advised in publishing this reprint of his most interesting lectures and essays, and we commend the volume to all medical men and especially to those in any way concerned in the protection of the public health.

HORROCKS ON THE BACTERIOLOGICAL EXAMINATION OF WATER. (*a*)

The name of this work is somewhat misleading, as it would naturally convey the impression that the treatment of the subject was elementary, while on the contrary the contents constitute rather a complete summary of what is known on the matter than what is usually understood by the term "Introduction."

The methods of examination advocated throughout the book are on the whole sound, though perhaps in some instances they might have been described with a little more clearness and detail, even if in doing so, more space had been taken up. Considerable attention is devoted to the description of the various processes employed for the discovery and identification of the B. typhosus in water and sewerage. That of Hankin especially, is well sketched, a matter of some importance, as this process often succeeds where other means have failed in isolating that very shy bacillus. The chapter on the action and utility of filters is an extremely important one. The author, while endorsing the verdict of former experimenters as to the efficiency of the Pasteur-Chamberland filter as a perfect protection against water-borne disease, is not able to speak so confidently of the Berkeley. He shows by a series of carefully thought out experiments of his own, that, given suitable conditions, the B. typhosus will *grow through* the Berkeley bougies, and eventually infect the filtrate. This fact is of vital importance and shows the absolute necessity of a frequent sterilisation of these filters if they are to remain efficient. This should be done by boiling at least every third day.

The book is nicely got up, and the plates are distinctly useful.

LANGLEY'S PRACTICAL HISTOLOGY. (*a*)

This little book is one which ought to prove invaluable to the student. The subject, necessarily somewhat intricate to the beginner, is treated in so interesting a manner that he acquires a considerable practical knowledge almost before he is aware of it. The first chapter, dealing with the use of the microscope, is especially useful, as it gives just the information necessary and not always obtainable from the text-books placed in the student's hands. While the author throughout the work chooses the simplest methods and employs the simplest language in describing them, a vast amount of very useful practical information is given. In the appendix is a concise description of various processes of staining and hardening the tissues under examination. We can recommend the book.

Literary Notes and Gossip.

Every progressive country is beginning to realise that while in all its faculties post-graduate study is desirable, in technical matters it is essential. The science and art of medicine is necessarily progressive and calls for life-long study. And yet the opportunities for post-graduate study are still meagre and, especially in this country, lack organisation. The New York *Medical Record* for June 21st contains valuable articles on the facilities offered for post-graduate instruction in Great Britain, Germany, and Austria, and the United States. Those who propose to visit Berlin or Vienna will find much that will interest them in these articles.

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Messrs. Bailliere, Tindall and Cox will publish in October, in one volume, a number of articles and addresses on surgical subjects by the late Sir William Stokes, F.R.C.S.I., whose death while serving as a consultant surgeon in South Africa is still deeply regretted. Sir William Stokes at the time he started for South Africa was engaged in re-writing these articles, with the object of publishing them, and Lady Stokes naturally desires that the publication should be continued. Professor Ogston, of Aberdeen, will contribute an introductory sketch of Sir William's life, while the task of editing the work is in the hands of Mr. William Taylor, F.R.C.S.I., Surgeon to the Meath Hospital. We are sure that the recollection of Sir William Stokes' powers as an operating surgeon and as a writer will cause many of his professional *confrères* to look forward with much interest to the publication of the volume which is in the Press.

⁂

We notice with pleasure the tendency to recognise the merits of members of the medical profession by the general public. It is not so very long since that the masters of medicine and their labours attracted little, if any, public recognition. All this is changed, and it is interesting in this connection to note the difference in the ninth and tenth editions of the "Encyclopædia Britannica." Among medical celebrities, in the first volume, we find a good biograpical sketch of Thomas Andrews, the Belfast man, who did so much for chemical science by his investigations on the heat developed by chemical actions; on the allotropic power of oxygen, ozone, and by his very complete inquiry into the laws expressing the revelations of pressure, temperature, and volume in carbonic acid gas, showing that the gas passes from the gaseous to the liquid state without any breach of continuity.

(*a*) "An Introduction to the Bacteriological Examination of Water." By W. H. Horrocks, M.B., B.Sc. Lond., Assistant Professor of Military Hygiene in the Army Medical School, Netley; Major, Royal Army Medical Corps. London: J. and A. Churchill. 1901.

(*a*) "Practical Histology." By J. N. Langley, M.A., Sc.D., F.R.S., Fellow and Lecturer of Trinity College, Lecturer on Histology and Deputy Professor of Physiology in the University of Cambridge. London: Macmillan and Co. 1901.

THE names of Oliver Wendell Holmes, S. Weir Mitchell, and A. Conan Doyle closely gather in one's memory as great novelists who were yet great in the field of action, and loyal workers in the world of medicine. The current number of *International Clinics* as its frontispiece gives an excellent photograph of Dr. Weir Mitchell in his Clinic at the Infirmary for Nervous Diseases, Philadelphia. He is shown investigating an obscure case, and surrounded by nurses and students. In the interesting accompanying sketch of his career we learn one of the secrets of the great physician's success. Dr. Mitchell's influence on young men is his marked characteristic. To his students he is ever a sympathetic and helpful friend. He is constantly suggesting to younger men new fields of labour, and instinctively knows the lines upon which investigations may be profitably pursued. Dr. Mitchell's contributions to physiology and medicine number about 140. He has published, as all the world knows, a number of delightful novels and many charming poems. He holds the belief that a physician in active practice may do what else he pleases, provided that his medical life and works assure him of his competence. Dr. S. Weir Mitchell is an example which many would fain follow.

⁂

WE congratulate our enterprising contemporary, the *Sphere*, on its valuable illustrated articles in its issue of June 28th, dealing with the story of medicine and surgery and philanthropy since the King entered on his public career, by Mr. Arthur Keith and Sir Henry Burdett.

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MANY medicals are ardent cyclists, and to those who reside in the neighbourhood of London we commend Mr. Charles G. Harper's delightful and artistically illustrated new work, "Cycle Rides Round London," published by Messrs. Chapman and Hall.

Medical News.

Consumption in Cheshire.

AT a recent meeting of representatives of the various Cheshire Town Councils, Boards of Guardians, and District Councils and the Health Committee of the County Council of Cheshire, it was decided that a sanatorium or sanatoria for the treatment of consumption should be established in the county, and that steps should be taken under the Isolation Hospitals Act with a view to an order being made to include all sanitary districts, and the consent of the Local Government Board is to be sought to include phthisis within the meaning of the Infectious Diseases Notification Act.

Society for Relief of Widows and Orphans of Medical Men.

A QUARTERLY Court of the Directors of the Society was held on Wednesday, July 9th, the President, Mr. Christopher Heath, F.R.C.S., in the chair. Two new members were elected, and the deaths of three members were reported and the resignation of a member accepted. Fresh applications for grants were read from two widows and grants of £50 per annum made. It was resolved to distribute £1,342 among the fifty-five widows, eleven orphans, and five recipients from the Copeland Fund now in receipt of grants. The expenses of the quarter were £47 19s. 6d.

Pass Lists.

The Royal University of Ireland.

THE Examiners have recommended that the following candidates be adjudged to have passed the First Examination in Medicine:—Madeleine S. Baker, James Barrett, Daniel Boylan, Harry L. Bristow, Francis J. Callaghan, George F. Campbell, Holden Carson, John Dunlop, John L. Dunlop, Patrick J. Dwyer, John R. Elwood, Eleanor E. Finegan, Edward FitzGerald, William J. Gallagher, James J. A. Gannon, James Gaston, Patrick J. Grogan, Rowland Hill, James J. Hollywood, James Horgan, Robert F. Kennedy, Charles G. Knight, Samuel W. Kyle, Thomas J. McAllen, Samuel McCormac, Jerome B. Murphy, Patrick F. Murphy, Joseph Nunan, Joseph A. O'Halloran, Humphrey J. O'Sullivan, Charles B. Pearson, Percy B. Ridge, Charles H. G. Ross, James A. Shorten, Thomas Tobin, Ernest F. Watson, Henry N. Wrixon.

The under-mentioned candidates have qualified on their answering to present themselves for the further examination for honours in the subjects set after their names. Those qualified in two or more subjects may present themselves for the honour examination in all subjects:—Madeleine S. Baker, zoology; Harry L. Bristow, physics; Francis X. J. Callaghan, zoology and chemistry; John L. Dunlop, physics; Patrick J. Dwyer, zoology; John R. Elwood, zoology; Rowland Hill, botany, zoology, chemistry, physics; James J. Hollywood, zoology; Robert F. Kennedy, botany and physics; Charles G. Knight, botany, zoology, chemistry, physics; Samuel McCormac, chemistry; Charles B. Pearson, botany and zoology; Percy B. Ridge, zoology; James A. Shorten, zoology and physics; Thomas Tobin, zoology; Ernest F. Watson, botany and zoology; Henry N. Wrixon, physics.

University of Glasgow.

THE following candidates have passed the fourth (final) professional examination:—

(A).—For M.B., C.M.—Thomas Small Goodwin.

(B).—For M.B., Ch.B.—William Kirkpatrick Anderson, William Armitage, Robert James Arthur, Alexander Grey Banks, James Campbell Bringan, Margaret Elizabeth Bryson, Angus Campbell, Robert Harold Campbell, John Shedden Dale, Alexander Dick, Donald Douglas, M.A.; Andrew Robertson Dow, James Drummond, George Ferguson, John Ferguson, M.A.; Eric Dalrymple Gairdner, William White George, John Miller Gordon, John Guthrie, John Andrew Hagerty, Ronald Dingwall Hodge, John Brown Dalzell Hunter, Neil M'Coll Hutchison, Ernest David Jackson, George Rutherford Jeffrey, William Fletcher Kay, John Kennedy, Andrew Miller Kerr, Robert Laurie, Archibald Leitch, Stanley Everard Lewis, Joseph Paterson Lusk, Alexander Macintyre, Ivy M'Kenzie, M.A., B.Sc.; John Chancellor M'Kenzie, Alexander Maclean, Alexander M'Gaw M'Millan, Dugald Henry Macphail, Richard Makins, Robert Harry Manson, Janet Thomson Miller, William Alexander Milne, Alexander John Mitchell, Allan Dixon Mitchell, John Morison, John Muir, B.Sc.; James Stuart Nicolson, James Nimmo Prentice, John Mark Reid, John Walker Renton, Thomas Richmond, David Riddell, William George Rodger, Norman Cumming Rogers, Andrew Taylor Ross, James Crawford Ross, James Russell, James Smith, John Williamson Smith, Robert Cassels Smith, David Spence, John Stevenson, John Barbour Stewart, Joseph Swinburn Townley, William Wagner Turner, Thomas Irby Wallace, Alexander Brown Watt, Joseph White, M.A., B.Sc.; David Ashley Wilson.

The following candidates passed with distinction in the subjects indicated:—

In (a) Surgery and Clinical Surgery, (b) Practice of Medicine and Clinical Medicine, (c) Midwifery—Andrew Miller Kerr, William George Rodger. In (a) Surgery and Clinical Surgery, (b) Practice of Medicine and Clinical Medicine—Alexander Grey Banks, Ivy M'Kenzie, M.A., B.Sc.; David Riddell, James Crawford Ross, Joseph White, M.A., B.Sc. In (a) Surgery and Clinical Surgery, (b) Midwifery—Thomas Richmond. In Surgery and Clinical Surgery—James Campbell Bringan, George Rutherford Jeffrey, William Fletcher Kay, Robert Laurie, John Morison, John Muir, B.Sc.; James Stuart Nicolson, John Mark Reid. In Practice of Medicine and Clinical Medicine—George Ferguson, Eric Dalrymple Gairdner, Ronald Dingwall Hodge, Ernest David Jackson, Richard Makins, Janet Thomson Miller, John Walker Renton, James Russell, William Wagner Turner, Thomas Irby Wallace. In Midwifery—Angus, Campbell, Alexander M'Gaw McMillan, Robert Menzies.

Notices to Correspondents, Short Letters, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

Dr. R., F.C.L.—Exactly what was desired.

Mr. Henderson.—The new discovery has not yet arrived in this country from America, but we hear it is likely to blossom in the autumn, and that the occupation of the medical profession will henceforth be confined to midwifery cases and broken limbs!

Mr. D. Kennedy.—Your case of suprapubic lithotomy with skiagraph to hand. Will appear in an early number.

An Edinburgh Student.—We have heard it rumoured that a new edition of the work is likely to appear shortly, but have seen no announcement to this effect. If the publishers decline to commit themselves, it is probably a case of uncertainty, and we would advise you to go on with the present edition.

R. F. H.—As far as is known, there are about 8,000 women doctors in the world, but no less than 6,000 of them reside in the United States.

X-Ray.—The diagnosis of actinomycosis can be made in three ways: (1) By the microscopical examination of an unstained preparation of the purulent material and the demonstration of characteristic bulbous rods therein; (2) By the microscopical examination of a preparation stained by Gram's method, in which there may be seen long rods or threads devoid of bulbous extremities. The spore-forms are usually encountered free in such a preparation; (3) By the microscopical examination of sections stained by Gram's method, in which both bulbous and non-bulbous rods or threads are found. It should be remembered, however, that while the demonstration of the bulbous forms establishes a diagnosis, their absence does not negative a diagnosis.

R. M.—You evidently share the popular idea of the exchangeability of the term "patent" and "proprietary" medicines. The stamp on the bottle does not establish a "patent medicine status"; it is merely an indication that the tax has been paid. As a matter of fact, there are very few "patent" medicines, and the unauthorised use of the word is punishable by a fine of £5.

Dr. Magenis.—We hope to have space for your case of "Iridectomy for Occlusio Pupillæ" in our next.

Meetings of the Societies, &c.

LONDON.

Wednesday, July 16th.

The Society for the Study of Diseases in Children.—At the Hotel Cecil, Strand, W.C. At 6.30 p.m., Annual General Meeting. At 7.30 p.m., Annual Dinner, Dr. H. Ashby (Manchester) in the chair.

Medical Graduates' College and Polyclinic.—4 p.m. Dr. Squire's Medical Clinic.

Thursday, July 17th.

Medical Graduates' College and Polyclinic.—4 p.m. Mr. Cantlie's Surgical Clinic.

Friday, July 18th.

Medical Graduates' College and Polyclinic.—4 p.m. Dr. St. Clair Thomson's Throat Clinic.

Appointments.

Barlet, Jehan M., M.R.C.S.Eng., L.R.C.P.Lond., Resident Medical Officer to the French Hospital, London.

Brown, William, M.D., C.M.Glasg., Medical Officer to the Children's Home of the Bristol Board of Guardians at Staple Hill.

McCarroll, J., M.B., B.Ch., R.U.I., Casualty Medical Officer of the Middlesex Hospital.

Peatling, A. V., B.A., M.B., B.C.Cantab., Honorary Medical Officer to the Carshalton Cottage Hospital.

Rigby, F. W., M.B., C.M.Edin., Certifying Surgeon under the Factory Act for the Bacup District of Lancashire.

Rowntree, C. W., M.R.C.S., L.R.C.P.Lond., Casualty Surgical Officer to the Middlesex Hospital.

Wright, John Aldran, M.A., M.D.Cantab., Assistant Physician to Addenbrooke's Hospital.

Vacancies.

Birkenhead Union.—Resident Assistant Medical Officer. Salary £120 per annum, with board, washing, and apartments. Applications to John Carter, Clerk to the Guardians, Clerk's Offices, 45, Hamilton Square, Birkenhead.

Brighton, Hove, and Preston Dispensary.—Two House Surgeons, one for the Northern and one for the Western Branch. Salary £160 per annum, with coals, gas, apartments, washing, and attendance. Applications to the Assistant Secretary, 113, Queen's Road, Brighton.

Camberwell.—Assistant Medical Superintendent for the Infirmary at Havil Street, Camberwell, and Workhouse at Gordon Road, Peckham, &c. Salary £150 per annum, with apartments, board, and washing. Also a Third Assistant Medical Officer of either sex. Salary £50, with apartments, board, and washing. Applications to the Medical Superintendent at the Infirmary, Havil Street, Camberwell.

City of Liverpool Infectious Diseases Hospitals.—Assistant Resident Medical Officers. Two Assistant Resident Medical Officers. Salary of £120 per annum each, together with board, washing, and lodging at the hospitals. Applications to the Chairman Port Sanitary and Hospitals Committee, Town Clerk, Municipal Offices, Liverpool, must be delivered at the Town Clerk's Office.

East London Hospital for Children and Dispensary for Women, Glamis Road, Shadwell, E.—Medical Officer for the Casualty Department. Salary £100 per annum. Luncheon is provided at the hospital. Applications to Thomas Hayes, Secretary.

Holloway Sanatorium Hospital for the Insane, Virginia Water, Surrey.—Junior Assistant Medical Officer. Salary £150 per annum, with board, lodging, and attendance. Applications to Dr. W. D. Moore, Medical Superintendent.

Newport and Monmouthshire Hospital. House Surgeon. Salary £100 per annum, with board and residence. Applications to the Secretary.

Nottingham General Dispensary.—Senior Resident Surgeon. Salary £200 per annum. Assistant Resident Surgeon. Salary £160 per annum. Furnished apartments, attendance, light, and fuel are found for the above surgeons. Applications to Secretary, M. I. Preston, Journal Chambers, Nottingham.

Royal Albert Hospital, Devonport.—Resident Medical Officer. Salary £110 per annum, with board and lodgings. Applications immediately to the Chairman of the Selection Committee at the hospital.

The Bristol Royal Hospital for Sick Children and Women.—House Surgeon. Salary £120 per annum, with rooms and attendance. Applications to the Secretary.

Births.

D'Erf-Wheeler.—On June 23rd, at Jerusalem, the wife of Percy D'Erf-Wheeler, M.D., F.R.C.S., F.R.G.S., of a daughter.

Roberts.—On July 8th, 1902, at Kingsdown, Church Road, Forest Hill, S.E., the wife of Francis Henry Roberts, M.R.C.S.Eng., L.R.C.P.Lond., of a son.

Deaths.

Curnow.—On July 5th, at Wimpole Street, Cavendish Square, London, after a short illness (acute pneumonia), John Curnow, M.D.Lond., F.R.C.P.Lond., of King's College Hospital, aged 56 years.

Edwards.—On July 9th, at Everton House, Eastbourne, John Augustus Edwards, M.R.C.S., L.S.A., for many years of Crediton, Devon, aged 90.

Loch.—On July 9th, at Umballa, India, of enteric fever, Ernest A. Loch, I.M.S., second son of Deputy Surgeon General J. H. Loch, M.D., of Clifton, aged 26.

Stiven.—On July 12th, at Manor Lodge, Harrow, Edward William Flemyng Stiven, M.D., in his 51st year, after a few days' illness.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—St. George's, 2 p.m.—St. Mary's, 2.30 p.m.—Middlesex, 1.30 p.m.—Westminster, 2 p.m. Chelsea, 2 p.m.—Samaritan (Gynæcological, by Physicians), 2 p.m.—Soho Square, 2 p.m.—Royal Orthopædic, 2 p.m.—City Orthopædic, 4 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a.m.—Royal Free, 2 p.m.

TUESDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex 1.30 p.m.—Westminster, 2 p.m.—West London, 2.30 p.m.—University College, 2 p.m.—St. George's, 1 p.m.—St. Mary's, 1 p.m.—St. Mark's, 2.30 p.m.—Cancer, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Royal Ear, 3 p.m.—Samaritan 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—Soho Square, 2 p.m.

WEDNESDAYS.—St. Bartholomew's, 1.30 p.m.—University College, 2 p.m.—Royal Free, 2 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. Thomas's, 2 p.m.—London, 2 p.m.—King's College, 2 p.m.—St. George's, (Ophthalmic) 1 p.m.—St. Mary's, 2 p.m.—National Orthopædic, 10 a.m.—St. Peter's, 2 p.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Gt. Ormond St., 9.30 a.m.—Gt. Northern Central, 2.30 p.m.—Westminster, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Cancer, 2 p.m.—Throat (Golden Square) 9.30 p.m.

THURSDAYS.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—University College, 2 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—London, 2 p.m.—King's College, 2 p.m.—Middlesex, 1.30 p.m.—St. Mary's, 2.30 p.m. Soho Square, 2 p.m.—North-West London, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central (Gynæcological), 2.30 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—St. Mark's, 2 p.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square) 9.30 a.m.

FRIDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—King's College, 2 p.m.—St. Mary's, 2 p.m.—Ophthalmic, 10 a.m.—Cancer, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—City Orthopædic, 2.30 p.m.—Soho Square, 2 p.m.

SATURDAYS.—Royal Free, 9 a.m. London, 2 p.m.—Middlesex, 1.30 p.m.—St. Thomas's, 2 p.m.—University College, 9.15 a.m.—Charing Cross, 2 p.m.—St. George's, 1 p.m.—St. Mary's 10 p.m.—Throat (Golden Square), 9.30 a.m.

At the Royal Eye Hospital (2 p.m.), the Royal London Ophthalmic (10 a.m.), the Royal Westminster Ophthalmic (1.30 p.m.) and the Central London Ophthalmic Hospitals operations are performed daily.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, JULY 23, 1902. No. 4.

Paris Clinical Lectures.

THE DELIMITATION OF THE HEART BY PERCUSSION AND SKIAGRAPHY, BEING A COMPARISON OF THE TWO METHODS.

By DR. POTAIN,
Professor at the Faculty of Medicine of Paris.

[FROM OUR PARIS CORRESPONDENT.]

A TOLERABLY accurate appreciation of the size of the heart and the changes which it undergoes are of unquestionable diagnostic importance. Although we are, in this respect, far ahead of the time of Corvisart, when hypertrophy of the heart and dilatation under the name of passive aneurysm, constituted practically the then knowledge of cardiac pathology, the overgrowth of that organ remains, in a large number of cases, the essential feature of the cardiac affections; and, in many cases in which the orifices are primarily attacked, the degree of dilatation which the cavities undergo is one of the principal indications of the gravity of the lesion. Lastly, when either the parietal endocardium or the myocardium alone is involved, the increase in size furnishes the most trustworthy guide to the existence of the lesion. Even in the physiological state, the size of the heart is far from constant. These variations in size are at times due to very trivial causes, which do not excite suspicion unless attention is drawn to them. Always an interesting study, they are also at times the indication of impending mischief, which must not be overlooked.

We have various means at our disposal for the recognition of these variations in size. But these means are far from being of equal value. Those which are usually employed are: (1) bulging of the præcordial region; (2) the force of the cardiac beat; (3) the exaggerated area of the apex beat; (4) displacement below and outside the spot where the shock of the apex is felt; (5) the delimitation of the organ by percussion. To these must now be added radioscopy and radiography. But we must not allow ourselves to be dazzled by this superfluity of means —it remains for us to ascertain the precise value of each of them, and the conditions under which they may be employed.

The first three afford very vague indications, which are met with in cases of very marked hypertrophy, but are wanting in less marked cases; they are, moreover, a frequent source of error, and, speaking generally, they only enable us to arrive at an approximate estimate of the increase in size. The displacement of the apex is a more trustworthy sign, but still does not enable us to measure the degree of hypertrophy or dilatation. We know, as a matter of fact, that in many subjects the apex beats normally in the fifth intercostal space, while in others it is in the fourth. If therefore we find it in the fourth we may rest assured that there is no hypertrophy; if it is in the fifth we learn nothing, since it may have been displaced in the event of its having originally been higher up. In the sixth it certainly shows an increase of size, but as it hardly ever goes to the seventh the displacement in the sixth is the only sign of hypertrophy either great or small. Its displacement to the left has a greater range, but it is not worth much except in respect of changes in the shape of the right cavity.

We now come to percussion of the præcordial region, which certainly gives more exact indications. It has, however, its critics, especially Prof. Tripier, of Lyons, who, in his work on cardiac semiology, maintains "that it only yields more or less vague results, except in cases of pericardial effusion or marked hypertrophy, because, if the borders of the lungs impinge on the vessels (?) this method fails to give any result." It is certain that, to obtain exact and comparable results, the delimitation of what is called the area of præcordial dulness must be performed systematically by precisely similar methods. I have already mentioned the one which I consider the best and which I always employ. I will refer to it here because it has been variously criticised.

In order to thoroughly understand it, we must bear in mind that in contact with the anterior thoracic wall, the heart resting on the liver behind the anterior edges of the two lungs, represents a large triangle with the base below, with a very obtuse and rounded upper angle, the left side of the triangle ascending very obliquely from the apex of the heart towards the apex of the triangle to the right side, merging with the right border of the sternum or overlapping it more or less. When we wish to delimit this area by the aid of percussion, I hold, contrary to the general opinion, that we must abstain from tapping on the præcordial region, but content ourselves with tapping along the periphery, along a series of convergent lines which start some distance from the usual limit of the præcordial dulness and run perpendicularly to the lines which circumscribe them. As long as the percussion is over a portion of the lung outside the heart the sound is full, grave, and apparently equal throughout, if there be no pulmonary lesion. The limits of the lung having been reached, the percussion note suddenly rises owing to the fact that the thickness of the layer of lung thrown into vibration suddenly becomes less. This rise in tone warns us that we have reached the limit. That point should be marked with a pencil. To continue percussion towards the centre of the præcordial region would mean waste of time.

We must bear in mind that it is not by a sudden and marked fall of the volume of sound, *e.g.*, by obvious dulness, that we recognise the instant we have reached the heart, but by a change in the *timbre* of the sound. This change is readily perceived when we are on the look-out for it. If, on the contrary, we are expecting merely diminished resonance, the heightened tone easily gives the illusion of increased volume.

We start therefore by determining, if possible, by the aid of palpation, the exact site of the apex beat, by percussion, the exact circumference encircling this spot, for this is a most essential part of the perimeter, and the most difficult to define exactly. Then we determine the corresponding line on the left and right of the dulness; lastly, the very rounded upper angle which corresponds to the arch of the aorta, since it is understood that the dulness that can be made out necessarily includes this spot.

It now remains to determine the lower limit of the heart, that which corresponds to the right border of this organ, and separates it from the liver on the upper surface whereof it lies. This, however, presents special difficulty, because both the organs in contact are equally dull on percussion, and it is extremely difficult to seize the exact shade of difference which distinguishes the two dulnesses, although the possibility of doing so has been asserted. I have adopted the method introduced by Constantin Paul, which consists in first of all determining, by percussion, the upper limit of the liver just as for the limits of the heart; then, starting from the point at which the line indicating this limit meets that of the right edge of the præcordial dulness, I draw another to join the lower border of the apex. It is true that this latter limit is artificial and passes across a portion of the right ventricle, which impinges on the upper surface of the liver.

When M. Bianchi, of Naples, proposed the method of delimitation to which he gave the name of phonendoscopy, I endeavoured to apply this method in the determination of the line which separates the liver from the border of the heart. I saw that it was practicable, especially by combining it with friction of the skin, not by following the converging lines leading to the foot of the instrument as M. Bianchi did, but by following circumferences having this spot for centre, and cutting the line of separation of these two organs. I also noted that the same result could be obtained with an ordinary stethoscope. Lastly, going back to the methods of Piorry, I discovered that there really was a rather marked difference between the sound given by the heart, and that given by the liver under digital percussion, and that it was possible to trace sufficiently accurately the limit between the two. I am inclined to think that this difference is due to pulmonary resonance produced by percussion of the heart, the gastric and intestinal resonance being influenced by that of the liver. But this is of little importance so long as the distinction is possible. What causes me to rely upon these rather laboriously obtained results is, that the limit obtained was always approximately identical, whichever of the three methods I employed.

This having been achieved, I endeavoured to ascertain the relative value of the portion of the præcordial dulness obtained by the method of Constantin Paul. To do this, having collected a fair number of drawings giving both the liver-apex line of C. Paul and the true limit of the border of the heart, I measured the inscribed surfaces by the aid of Amsler's planimeter. The result was that the portion left outside the tracing by the method of C. Paul was nearly always one twenty-eighth of the total area of dulness.

I do not therefore feel called upon to abandon the method which I first of all adopted, since it goes without saying that we cannot obtain, by the aid of percussion charts, either a true outline of the heart, since we only obtain a surface projection of a heart placed obliquely; nor its exact dimensions, since we include the aorta, which does not belong to it, but only a figure which sufficiently represents the real size of the organ. But, as the portion excluded by our method is constantly proportional to the whole, it results that, with or without it, we can always estimate in the same manner the proportion between the dimensions obtained and the normal dimensions. We may, therefore, assert that both methods are equally good in regard to the results which they furnish. But as the delimitation of the border of the right ventricle is above all extremely delicate, as it demands great attention and care, and may certainly give rise to more errors than the other, I think it better to keep to my method, especially as comparison with the numerous previously acquired data would only be possible by introducing a correction; otherwise we should have to begin over again.

One consequence of the recently-introduced method is that we must always mention, when stating a given result, by which method it was obtained.

Once in possession of an exact drawing of the præcordial dulness, in order to judge how much this dulness differs from the normal we have only to measure it. For a long time we have contented ourselves with measuring the length and height. But this double dimension makes comparisons rather difficult. These are much easier if we measure the area of the surface, and this may be done in several ways. The simplest, and the one, for example, which M. Cassaet advises, consists in transferring this drawing to a paper ruled in squares and then to count the number of squares contained. But if the squares are large, this does not give very exact results; while if they are small, the calculation is very tedious. Another way consists in cutting out the drawing which has been traced and weighing it against a piece of similar paper of known dimensions. This may be very exact, but it too is rather tedious. Lastly, there is one method which gives in an instant a measure of absolute precision, and that is Amsler's planimeter. The addition of another instrument to those which we are already compelled to use, although it may be worth the trouble in a particular series of observations in order to make them as exact as possible, is really unnecessary in every-day practice.

After having measured in this way a very large number of drawings, I found that it was possible to obtain a fairly correct estimate by measuring the length and height of the drawing, and then multiplying each one by the empirical cœfficient of 0·83. One precaution is however necessary when the line corresponding to the right edge of the dulness, instead of descending almost perpendicularly to the base of the triangle, is oblique and falls outside, viz., to lower a tangent perpendicular to the extended base, and to add to the length half the distance which separates the foot of this tangent from the right lower angle of the dulness.

Measurements made on a large number of adult men furnished me with a minimum of 90 cc. I cannot make any positive statement concerning the heart of women in the normal condition, since I was unable to obtain a sufficient number of drawings of women in an absolutely physiological state.

The principal objections which have been made to the use of percussion in estimating the size of the heart are that it is difficult of execution, and only gives uncertain and often conflicting results, according to the methods employed and the persons who employ them. This criticism would be justified, as

I have said, if we did not make use of a constant method and pay sufficient attention. It is not justified when these conditions are fulfilled. As to the difficulty, it is far from insurmountable. I have had this percussion performed very often in my presence by my students, and then without seeing the result, have myself repeated the process, and obtained absolutely identical limits.

But the question which semiologists must especially have in view is that of ascertaining in what measure the limits of this dulness exactly correspond with those of the organ delimited. For, in spite of the precision with which we may circumscribe this dulness, in spite of the identity of the limits found by several successive observers, it is possible, after all, that they only correspond very imperfectly with the real outline of the heart, and that the propagation of the vibrations imparted to the thorax by percussion in various directions differs from them more or less.

Percussion practised on a corpse, unfortunately, gives uncertain results which cannot well be compared with those obtained on a living person, owing to the excessive tympanism of the dead thorax. The comparison of the dead heart with the drawing obtained during life is also rather unsatisfactory, and must necessarily be somewhat vague and uncertain, since the size of the heart may have changed in the interval between the delimitation and the autopsy; moreover, in the dead the heart is not always the same size as during life, either because it undergoes a more or less marked dilatation during the agony, or, on the contrary, because its contents have been more or less completely drained away.

In the endeavour to test the accuracy of the delimitations practised in my wards, I found that the only way was to take, on the one hand, all the post-mortem examinations during a long series of years in which the volume of the heart had been carefully noted, and then to take all the measurements of the area of the dulness in the corresponding patients and to schedule the cases in three classes according to the size indicated. Now, we found that the three classes corresponded exactly, and that there was never in this respect any noteworthy error. But even this left us far from that degree of precision which is desirable in this verification. No greater precision, however, was possible for reasons which I have already given, also because the diameters of the heart measured at the post-mortem examinations do not correspond to those of the contact projection of the heart on the thoracic wall. Radioscopy has fortunately furnished us with an infinitely more exact means of control, and the two tests can be applied almost simultaneously, thus furnishing us with data for careful comparison.

The results given by radioscopy are not, however, exempt from error nor are they able to dispense with corrections. Like percussion, they include the aorta in the perimeter indicated, like it they confuse the lower border of the projection with that of the liver. Moreover, owing to the divergency of the Röntgen rays, a divergence which is rather marked owing to the impossibility of placing the source of the rays far away from the object, there is produced on the screen an enlargement of the image which it is indispensable to bear in mind. Lastly, the limits of this image, always rather blurred, present a zone of twilight in which it is not very easy to distinguish exact limits. However, by selecting cases in which the image is sufficiently clear, or by making it such by the use of a suitable diaphragm, by noting very exactly the distance of the source of the rays, its position, the shadow of the thorax, and the situation of the screen, we are able, either by calculation or in the way indicated by M. Variot, or by an extremely simple graphic construction, to make the necessary corrections, and to obtain an image which may be considered as representing a projection of the heart and aorta on the thoracic wall in its true dimensions. This is the one which may be usefully compared with the charts furnished by percussion.

To facilitate this comparison, after having traced on the thorax the limits of the cardiac and aortic dulness, I make a tracing of the radioscopic image by the aid of tracing paper, for my guidance, the upper border of the liver, the lateral edges of the sternum, the sternal notch and the borders of both clavicles. Then I transferred the whole to glass by the aid of ink, and apply this to the radioscopic screen; and lastly, I place the latter in front of the thorax, taking care to make my guiding points coincide with those which ought to correspond thereto in view of the position of the source of the rays.

Under these conditions I always found the percussion tracing correspond very closely with the radioscopic image. Having traced the latter on glass and made the necessary corrections by the aid of the construction I mentioned, it was found that the two images, that of percussion and the corrected radioscopic image, almost always exactly coincided.

On one occasion only did I discover a slight discrepancy. The radioscopic image, even when corrected, showed the right auricle a little outside of the limit indicated by percussion. Starting the latter afresh I found that the semi-dulness produced by the auricle behind an emphysematous lung really commenced a little earlier than had been marked. I inferred that the depth at which the most prominent part of this auricle is situated renders its delimitation extremely difficult, and necessitates very careful percussion.

More than once I have had occasion to use percussion and radiography in the determination of rapid modifications in the size of the heart, and the results always coincided.

We may, therefore, affirm that both methods furnish very reliable results, and this clearly confirms the value of percussion. These results having been obtained by absolutely dissimilar means, it is impossible to conceive that any errors could coincide.

Although radioscopy can thus assist in verifying the results of percussion, we must not therefore conclude that it is to be preferred as a means of diagnosis, and substituted in practice.

We have shown that the results, however obtained, are practically identical, we might, consequently, as well say that percussion enables us to control the results of radioscopy. It is not as if radioscopy were easier or simpler to employ than percussion; on the contrary, it requires vastly more care and attention and at least as much previous experience. It necessitates more corrections than does the drawing by the plessimeter. It leaves us just as much exposed to form erroneous deductions, and leads, in careless or insufficiently practised hands, to gross errors, of which I have met more than one example. Moreover, these errors are the more vexatious owing to the blind faith which we place in an apparatus which we imagine to be infallible and which must, we think, furnish indisputable results.

Lastly, it is not always possible for it to be utilised, for the apparatus is very cumbersome, and, therefore, difficult to convey from place to place. The patient must be taken to the apparatus, and, in consequence of this, it cannot be utilised in the case of patients unable to be moved.

Percussion, on the contrary, can always be practised without the aid of any instrument or apparatus, and since it gives identical and equally exact results is, in a general sense, infinitely preferable.

Moreover, it would be highly regrettable should the rising generation of practitioners abandon the practice of percussion and pin their faith exclusively to radioscopy in regard to the delimitation of the heart.

Not that radioscopy or radiography, in careful and experienced hands such as those of the adepts who practise in our hospitals, cannot furnish data very useful to the study of heart disease, data which confirm or invalidate those obtained by other methods. What I mean is that neither method can or should take the place of the other.

Original Communications.

TUBES AND CYSTIC OVARIES
FROM A
RUDIMENTARY UTERUS:
SECONDARY GROWTH FROM THE ABDOMINAL CICATRIX AFTER HYSTERECTOMY. (a)

By R. D. PUREFOY, M.D., &c.,
Master of the Rotunda Hospital.

The first specimen was removed from a single woman. æt. 23, one of a family of eight children, all healthy; she had had no severe illness in childhood, or since. At sixteen she began to suffer at intervals of two, or three, months from severe pain in her left side and back, accompanied by headache and vomiting on first day. The pain in the left side sometimes extended down the left leg as far as the foot, and rigors commonly occurred once during such attack. These attacks rendered her incapable of any useful exertion and she therefore came under my care about three weeks ago. She was a tall, well made, and well nourished young woman, and had never menstruated, though the breasts and external genitals were normal in size and appearance. On separating the labia, the hymen was observed to be imperforate, and further examination showed that there was no vagina; the uterus was represented by a small solid body about 1 in. in length and a quarter of an inch in diameter; and on each side a large cystic ovary could be easily felt. The removal of these appeared to be the most rational treatment, and this I did a week ago, the patient being now quite convalescent. On the left side the tube bore the usual relation to the ovary at its fimbriated extremity; at its uterine end it became gradually smaller and more attenuated till it was lost in the fold of peritoneum which extended across the pelvis to the right side, where the abortive uterus was found, and, springing from its cornu, the right tube, much smaller than usual, and closely related to the corresponding ovary, which, like the left, was considerably enlarged and thickly studded with small cysts. I believe such a coincidence of normal and abnormal conditions in the utero-ovarian system is uncommon. Interesting questions are suggested by the clinical fact that, though the ovaries are so similar, pain was referred only to the left, and by the rigors and rise of temperature (1½°) which attended the menstrual molimen.

The second specimen is from a woman, æt. 40, mother of four children; for some years suffering from the increasing size of her abdomen, due to a large firm tumour springing chiefly from anterior surface of uterus, and attended with menorrhagia, and marked impairment of general health. I performed panhysterectomy, and had unusual trouble in controlling the bleeding owing to the number and size of veins and the abnormal distribution of the uterine vessels. An excellent convalescence ensued, and when I removed the abdominal stitches eight days later, the cicatrix was all that could be desired. On raising the dressing a few days afterwards I found it was adherent to a mushroom-shaped growth springing from the upper angle of the wound, which passed close by the navel. Its widest part was about 1·25 ins. in width, and the pédicle about half-an-inch in thickness. An elastic ligature was passed round it, and some days later a silk one was applied; neither caused any pain, and after a little time the mass was easily removed with scissors. Though insensitive it was amply supplied with blood, and I was consequently content to proceed very slowly with its removal.

I have had one similar experience, though the cases present points of contrast worth noting. About two years ago I removed a moderate-sized ovarian cyst from a delicate middle-aged woman; and (as in the case just narrated) an excellent cicatrix was present on the eighth day, when I removed the abdominal stitches. About five or six days subsequently a pedunculated growth, larger than in any other case, was found springing from a point about the middle of the wound. Its growth was unattended by pain of any kind, and in places its surface was quite smooth, though for the most part looking like granulated tissue. Its removal was effected, as in the other case, by repeated ligatures. The patient returned to the country, and at any rate some months afterwards was in good health. I am not aware that such a sequel to hysterectomy has been reported, especially where the tumour removed was benign. On page 56 of Mr. Sutton's work ("Diseases of the Ovaries") the occurrence of such growths after ovariotomy is noted and explained, though no account is furnished of the microscopic structure of the tumours.

IRIDECTOMY FOR "OCCLUSIO PUPILLÆ SINE SECLUSIONE PUPILLÆ."

By EDWARD MAGENNIS, B.A., M.D.

This interesting and rare condition, in which membranes grow across the pupils and cause partial or complete blindness, was brought under my observation some time ago in the case of a tradesman, whose vision had become so defective that he had to be led into my study by his brother. I performed an iridectomy on both eyes, with the result that he is now enabled to earn his livelihood and his sight was so improved that three months after the operation he could see sufficiently well to write me a letter.

The history of the case is briefly as follows:—J. H., æt. 44, a strong, healthy man, a tailor by trade; good family history. His vision was excellent up to about sixteen years ago, when he had inflammation of both eyes so bad that he was detained in an eye hospital for some weeks. Since that time he has had several similar attacks. After these attacks he noticed his sight beginning to fail, and he says he occasionally saw "clouds floating in front of both eyes like waves of water." His vision gradually and steadily became worse. On examination I found that the pupillary fields were almost entirely covered with an exudate, the result of the numerous attacks of iritis which, in time, had become converted into thin membranes of connective tissue, and the layers of retinal pigment on the posterior surfaces of the irides had become, here and there, adherent to the capsules of the lenses. The membranes stretching across the pupils were in like manner attached to the lenses. On ophthalmoscopic illumination, through the chinks in the membrane, I found the fundus reflex good in all directions in both eyes, the anterior chambers were but slightly shallowed. I learned from him that during his stay in hospital drops had been put into his eyes, presumably to dilate the pupils and break the adhesions, but they invariably brought on attacks of inflammation, and he suffered great pain. I performed an iridectomy on the right eye. I did it upwards, as I dreaded, from the disturbance of severing the adhesions, that a cataract would speedily form.

(a) Read at the British Gynæcological Society, July 10th, 1902.

When I caught the iris in the forceps it was so friable, from atrophy, it gave way, and only by a sort of wriggling, side to side movement of the forceps, and by the exercise of extreme caution was I enabled to get it out of the wound and to avoid an irido-dialysis.

On removing the dressings next day I found the anterior chamber refilled, and the eye looking well. Three weeks afterwards I operated in a similar manner on the left eye, and the iris here was even more friable than that of the right.

On examining the fundi, when the eyes were sufficiently well, I found extensive choroiditis in both. This I attributed to an extension of the inflammation from the iris to the choroid.

The condition "occlusio pupillæ," or shutting up the pupil, was here brought about by a fairly well-organised membrane stretching across the pupil, yet the condition "seclusio pupillæ," or shutting off of the pupil, was not perfected, inasmuch as the adhesions round the pupillary margin were not complete, but only occurred at particular spots, thus allowing tolerably free communication between the anterior and posterior chambers.

I had some doubts as to the advisability of operating in this case, as it was impossible to accurately judge the true condition of the fundi, and seeing the perfect state of organisation of the membranes I concluded that the pathological adhesions would be very firm, and that their breaking up might cause rapid degeneration of the lenses. However, my patient earnestly solicited that something should be done, and believing that an iridectomy, besides the immediate improvement of vision, would have a beneficial effect upon the nutritive condition of the eye, I decided to operate. Here was a married man with a large family dependent on him, and unless something was done his wife, his children and himself would have become parish charges. He is now making a respectable livelihood by soliciting orders for clothes, he wears dark-coloured spectacles, and is able to read ordinary print.

PHYSICAL EFFICIENCY IN CHILDREN. (a)

By Sir JAMES CRICHTON-BROWNE, M.D., LL.D., F.R.S.

Amidst the multitudinous scintillations of minute physiological exploration, the brilliant discoveries of bacteriology and the curious side-lights of experimental psychology, we have somewhat lost sight of the assistance that the patient employment of the scales and tape measure is capable of affording us in understanding our human economy and in regulating human progress. The time has come however, for an awakening on the subject of physical efficiency and for the bestowal of due attention on the methods by which it may be gauged. We have begun to realise that the conditions of industrial competition in the world have changed, that we in this country no longer possess the incontestible superiority in skill and productive power we at one time enjoyed. We have begun to perceive that the competing nations around us are becoming commercially transformed and are encroaching on our markets more and more, and we have begun to discover, with consternation, that we are losing not only our geographical advantages, but to some extent, the stamina of our people. The diminished death-rate upon which we have been wont to pride ourselves is but a sorry comforter if the population we are keeping alive is increasingly sickly and debilitated, and technical education will be of small avail if the standard of health among our working classes is being gradually lowered. And unhappily there is evidence of a striking kind that the people of our large towns at any rate are physically deteriorating. The sum-total of our physical shortcomings must be a figure that it would be woeful to contemplate. But apart from statistics, anyone who has watched the stream of men, boys and girls, issuing from a factory in the East End of London or any large town, must recognise the fact that they are stunted and pale and weak-looking when compared with our agricultural population.

The decline in physical vigour of our urban population must, of course, be attributed to the conditions of town life generally, but of these there is, it seems to me, one predominantly influential, and that is insufficient feeding during infancy and childhood. It is the want of nourishment during the growth period that is the principal cause of the dwarfing and enfeeblement of our towns-people—and that want of nourishment is due to poverty—either as defined by Mr. Seebohm Rowntree in his masterly treatise, primary, when the whole earnings of the family are inadequate to its proper maintenance, or secondary, when the earnings, although enough for maintenance, are absorbed by other expenditure, useful or wasteful.

These figures of Mr. Seebohm Rowntree afford a painful but edifying glimpse of the havoc that poverty is playing in our wage-earning class in towns, and of the physical deterioration that is going on among the poorest portion of the community; and on no small scale, for he calculates that nearly 30 per cent. of the population are living in poverty and are ill-housed, ill-clothed and underfed.

Dr. Noel Paton and Dr. Dunlop, after searching investigation and careful analysis, have concluded that the diet of a typical labourer's family in Edinburgh is decidedly too small to support even moderate labour, both when estimated in calorics and in proteid value, and they suggest the possibility, that the inhabitants of large cities may have their growth and working capacity limited not only by poverty but by bad teeth and digestive inadequacy. They show that the food supply of our poorer working classes compares unfavourably as a source of energy and most unfavourably as a source of proteid with the diets of the inmates of poor-houses, prisons and lunatic asylums, and they point out that this food deficiency is experienced not merely by the drunken and thriftless, but by the steady, industrious, frugal poor, who cannot make both ends meet. Especially harmful to growing children of restless habits must this food deficiency be, particularly the curtailment of its proteid constituents, for all observers are agreed that in Europe good health and normal development cannot be long maintained without a full proteid allowance. We can scarcely be surprised to find degeneracy of offspring when we learn that large numbers of mothers of the poorer working classes are during pregnancy and nursing confined to a diet consisting almost exclusively of bread, dripping and tea.

The children of the poorest section (those of whom a considerable contingent may be seen every Monday morning seated with their little weekly bundles on the steps at the door of the pawnshop, waiting for it to open), are said to present a pathetic spectacle. They bear in their puny bodies, sore eyes, filthy heads, swollen glands and lame joints, the unmistakable marks of privation and neglect. They are sent into the world grievously handicapped. Through no fault of their own, these dirty atomies have been deprived of their germinal birthright. They have been subjected to sufferings that leave scars behind, they have had their score of vitality reduced, and so are left with a diminished power of resistance to the temptations to which they will be exposed, and with a diminished capacity for bread-winning; and they have been cheated of fair proportion, and disfigured in a way that is past remedy, for it is a lamentable fact that no subsequent supply of nourishment, however liberal, will fully compensate for starvation during infancy and childhood. Time lost in growth can never be completely made up. Thus it has been found on training ships to which pauper boys from metropolitan unions and parishes have been sent, that under the most generous treatment and living singularly healthy lives, they always remain more or less stunted in development. The boys sent to these ships are selected, and are certainly not of the worst and most depraved pauper class; but while a marked and most encouraging improvement takes place in their bodily health, bearing, and general intelligence, they retain in their low stature a record of the hard usage and poor feeding of their early days. I recollect that in the prologue to an entertainment given by the boys on board the *Exmouth* there occurred these lines:—

(a) Abstract of the Presidential Address delivered on July 16th in the Medical and Hygienic Section of the International Congress for the Welfare and Protection of Children.

> "And yet there's one thing saddens us and that is—
> That we with all our pudding, beef, and gravy,
> Can't reach the standard of the Royal Navy."

The enduring effects of an early blight are painfully illustrated in Mr. Cheattle's recent report on the Hanwell Poor-law Schools. He found that of 1,000 children in these schools 520 could not pass the whisper test for hearing, 335 were or had been the subjects of discharge from one or both ears, eighty-eight were suffering from chronic suppuration, and 434 had adenoids.

I have dwelt on the feeding of children because that is, I believe, the paramount consideration in relation to their physical efficiency.

"Whence shall we buy bread that these may eat?" is, to my thinking, in its economical and national aspects, the pressing question of the hour, for enhanced physical efficiency is indispensable if we are to hold our own in the world. The United States of America are becoming formidable in their rivalry to us, not only because of their spirit of enterprise, marked ingenuity, and boundless resources, but because, as recent investigations have proved, their workers are better nourished than ours. The food question is really of infinitely more moment in the restricted area to which it applies than the education question about which we hear so much (though, of course, they are to some extent bound up with each other), for education cannot take the place of nutriment and "the sincere milk of the word" is no substitute for that of the cow. It is for statesmen, diplomatists, and publicists to grapple with that question in its larger bearings, while local authorities, philanthropic agencies, and neighbourly good feeling deal with it in detail. Much has been done to alleviate the pangs of underfed children, but the evil is a gigantic one, and is not to be met by the supply of occasional meals.

It is for my own profession to supply information as to the best and most economical foodstuffs and as to the best balanced dietaries for the working classes. On that subject I dare not enter here beyond pointing out the danger of the faulty bread and tea meal, and the high value of porridge and milk. It has been calculated that an entire day's diet of tea, bread and butter on the one hand, and of porridge and milk on the other, gives a balance in favour of the latter of 22 grains of proteid, 32 grains of fat, and 100 calories at a cost of 4·5d. against 5·2d. for tea, bread, and butter, a saving of ·7 of a penny, or nearly three farthings a day. Unhappily, porridge and milk have lost their former firm hold on Scotland, but they seem to have commended themselves at least as an addition to breakfast to the well-to-do classes south of the Tweed, and perhaps the working classes in England may be brought to recognise their advantages as well as those of lentils, beans, peas and bacon, also highly nutritious and cheap foods.

There is one source of physical impairment in children, besides underfeeding, to which I would particularly allude, because its influence is direct and obvious, and that is child labour. The raising of the age for half-timers has been salutary, and the introduction of automatic machinery, the spread of education and the force of public opinion, are steadily circumscribing this kind of employment; but it still exists in certain districts, especially in the textile trades, and where it does exist its pernicious consequences are appreciable.

Rapid changes are taking place among us in consonance with our quickened rate of living. I might instance the sudden appearance during the last fifteen years among the wealthier classes of large numbers of women of the tall, willowy and narrow pelvis type, the antithesis of the plump, thickset, rotund Englishwomen whom Nathaniel Hawthorne forty years ago described as occupying an undue share of their Maker's footstool, thereby giving great offence. On all hands transformation good or bad is in progress, and it is surely expedient that by stocktaking and physical appraisement of our children from time to time we should ascertain the directions in which the several constituents of our population are moving. Man is now engaged in retracting intelligently the several steps through which he has automatically evolved, and it behoves him to determine as far as may be the laws regulating his own growth, and to apply the knowledge thus acquired to the betterment of his kind. Lord Grey has told us that we have nearly doubled the size of our cattle and sheep during the last century by recording their weights and paying careful attention to their requirements. Human beings are not so readily handled as flocks and herds, either as regards their breeding or feeding; their instincts, their aspirations, their volitions are complex and difficult to control; the medium in which they move is in incessant flux, and they themselves are highly migratory; their organic response to external agencies is slow, and often hard to interpret, but still I am fully persuaded that by measuring and weighing their young, and by paying careful attention to their requirements, we may in less than a century vastly improve their physical condition, and that is the foundation upon which moral and intellectual improvement must be reared. I am fully persuaded that it is by securing an adequate supply of suitable, wholesome, unadulterated food to the children of the submerged fourth of our town population that dwindling in stature and general degeneracy can be best prevented, and our national physical efficiency best maintained.

In these days, in this country at any rate, we have both too much and too little physical exercise. When it becomes the object of life, is pursued for its own sake and is associated with betting, it becomes one of the varieties of physiological intemperance, has a pernicious influence on life and character and sometimes eventuates in dilatation of the heart, aneurysm, or other morbid catastrophes. One refers to the subject with fear and trembling, but I cannot refrain from expressing my belief that there would be a gain in health and happiness to the upper classes, if they would make some of the physical energy they now lavish in amusement definitely serviceable. There was considerable force in Mr. Dooley's observation that the Battle of Waterloo was won not on the playfield at Eton, but in the potatoe patches of Wexford. The healthy, well-fed, well-made child, living a natural country life, may be safely left to regulate its own physical exercise. Its "*besoin de respirer et de folâtrer*" and its curiosity, and the solicitations of the beauty and wonder round it, will amply stimulate its active powers and the sense of fatigue will keep them duly in check. But the town child, living under highly artificial conditions, and often amidst narrow limitations, requires guidance and encouragement in its exercise, and opportunity for its indulgence. We hope to make a lot of our town children into country children one of these days, but there must always remain multitudes of town-pent little ones, and for them the means of physical exercise must be provided. First of all, we want open spaces, parks and gardens planted with trees and flowers to appeal to the æsthetic sense, and playgrounds in which the children can unrestrainedly frisk about.

Besides feeding and physical exercise, multifarious agencies operate on the child and help to make or mar its physical efficiency, and all these I would sum up under Mothering, Homing, and Schooling, which I name in the order of their importance. Mothering, in its widest sense, includes the physical care of the child, as far as family means allow, and those moral influences that, more than anything else, mould its character and bias its career. Matthew Arnold said that four-fifths of life are conduct; and it has been remarked that the only error in his statement is that it did not include the other fifth. Well, for my part, I am satisfied that in a large majority of men and women four-fifths of conduct are of the mother's making. It is hers by natural affinity best to understand the workings of the child's mind, and while it is in the most plastic moods to impart to it lasting impressions. It is hers, if she be worthy of motherhood, to implant sustaining ideals, and to teach the child to love and admire, to trust and endure, and to postpone the advent of jealousy and doubt. And as regards an enormous preponderance of the mothers in this country I rejoice to believe that their maternal duties are, according to their lights, well and faithfully performed. Exceptional instances of cruelty and neglect are occasionally reported, and the indignation they excite shows how exceptional they are, but as a rule our English mothers of the working-classes—and I believe all medical men practising among the poor will testify to this—are, with all their ignorance, stupidity, and superstition, affectionate to their children, zealous to promote their comfort and enjoyment, tenderly solicitous for them in sickness, anxious to make them honest, polite and considerate to the weak and suffering. It is to our English mothers, I suggest, that we mainly owe the admirable conduct of our soldiers in South Africa.

But while I say this of our working-class mothers, I cannot help feeling that mothering is in danger at both ends of the social scale. There is a good deal too much of what might be called cuckooism among the well-to-do! The cuckoo has been described by Brehm as "a discontented, ill-conditioned, passionate bird." It shirks the brooding sacrifice and responsibility of parentage, and in the words of Scripture applied not altogether justly to the ostrich, "is hardened against her young ones as though they were not hers." Are there not fashionable mothers who might thus be described? I know not how to frame an indictment against a set. There is, I suppose, a super-smart set among us who retain amidst the stately circumstances to which they have been born, simplicity in living and sweet secluded domesticity, but below them there is, I am told, a smart set, rich and luxurious, many of the women of which—given up to club and restaurant and rout haunting—like the cuckoo, neglect their offspring to their own great detriment; for it is in the loving performance of maternal functions that the nature of the woman finds its fullest and finest efflorescence.

Such women delegate their maternal duties as far as possible. Feeding-bottles, nurses, French maids, governesses, and lady-helps relieve them of them, and their children grow up bereft of motherings and may be damaged in health by their deprivation. Mr. Rudyard Kipling has drawn a touching picture of a little Anglo-Indian boy who was actually dying of brain disease brought on by want of mothering, and was brought back to health when allowed to bask in it once more, and every nurse in a sick children's hospital knows what an efficacious anodyne and tonic it is, even when vicariously supplied.

The education of children labouring under tuberculosis should be carried on in special seaside sanatoria where they cannot be baneful to others, and where everything is made to minister to their restoration to health.

The King, over whose recovery we are rejoicing, whose fortitude and unselfish devotion throughout his illness have filled us with admiration, and who is Patron of this Congress, said at his first Council, "I am fully determined as long as there is breath in my body to work for the good and amelioration of my people." It is for his subjects to aid him in that noble mission, and even the humblest of them may do something by throwing his mite of personal endeavour into the treasury of public philanthropy, and in no way can the good and amelioration of the people be more surely advanced than by providing for the protection and welfare of little children.

FOUR CASES OF VAGINAL AND ABDOMINAL HYSTERECTOMY. (a)

By F. A. PURCELL, M.D.,

Surgeon to the Cancer Hospital.

Case I.—*Uterus Removed by Vaginal Hysterectomy, showing a Carcinoma of Corpus Uteri in an Early Stage.*

The case is that of a widow, æt. 54, a healthy woman, who had had no children and no miscarriages; she passed the menopause some three years ago. Her menstruation had been regular, but with pain during flow and occasional leucorrhœa. About a year ago she noticed a slight discharge, occasionally purulent and fœtid. When walking about she sometimes felt a pain as if cut by a knife. The last three months she has had a discharge of blood, as if from a slight period.

Present Condition.—External genitals normal. Vaginal wall smooth, except just inside on the right, where carunculæ are rather indurated and tender. Capacity of vagina small. Uterus to the front mobile, not apparently enlarged. Cervix sessile and almost flush with vaginal roof. Cervix nulliparous. Fornices normal. On March 5th, 1902, the uterus was curetted and the scrapings were sent to be examined microscopically by Mr. H. J. Plimmer, who reported "that the specimen is from a case of carcinoma of the endometrium," and on this report the patient was advised to have the uterus removed. On April 2nd I extirpated the uterus per vaginam. The vagina was very narrow, which increased the difficulty of the operation. The patient made an uneventful recovery.

On section, some blood clot lay along the cavity of the uterus; the section showed a small fibromyoma lodged in the muscular structure of the neck of the uterus. No definite opinion as to malignancy can now be obtained from Mr. Plimmer. He says, "I have taken some pieces, but it is spoilt as a specimen by being put into strong spirit. At any rate it will be no good for a permanent preparation."

This certainly leaves the case rather undefined.

Case II. is that of a uterus which had expelled a round polypus, about the size of a very small tangerine orange, attached by a pedicle to the posterior wall of the body of the uterus. To remove the pedicle the patient was placed under an anæsthetic, and the uterus was under process of dilatation, and when No. 9 of Hagar's dilators was being introduced it suddenly slipped and perforated the fundus, so that its end could be felt through the abdominal wall. Vaginal hysterectomy was then performed, and the patient made an uneventful recovery. On the evening following after operation the patient managed to secrete an orange, which she ate, and during the temporary absence of the nurse from the ward left her bed, and threw the peel in the fireplace. She then got back to bed just as the nurse returned, some of her dressings being found at the fireplace. In spite of this she had no sickness or hæmorrhage. The patient was a healthy woman, æt. 52, who had had no illnesses, nine children, two miscarriages, her last pregnancy six years ago ending in a miscarriage at the third month. She had had several floodings since, which would come on suddenly with a lot of clots. A large flattened polypus was found in the vagina, the pedicle, long and thin coming out of the cervix uteri. The tumour was soft and fleshy, red, and ulcerated in places, the cervix dilated. This is the case I alluded to when Dr. H Macnaughton-Jones showed Professor Bossi's instrument which he had used for dilating the cervix in a case of albuminuria of a seventh month gestation.

Case III.—The specimen of multiple fibroids of the uterus was removed by abdominal cœliotomy from a married woman, æt. 47, admitted into the Cancer Hospital, March 11th, 1902. The patient had never been very strong, had suffered from dyspepsia for a long time some years ago, had had enteric fever. No children. Menstruation began at thirteen years, a three-week period, the flow fairly copious, lasting from eight to ten days, no pain. Eight years ago she was in the Cancer Hospital, suffered from constant vomiting, no blood, constipated; she had hæmorrhoids which bled occasionally.

(a) Notes read at meeting of the British Gynæcological Society, July 10th, 1902.

Two years ago she began to suffer from a dragging pain in her right side, and she then noticed a lump in the right iliac region; the mass varied in position. There had been no alteration in her periods. On the right arm and on the right leg she had two fibrous tumours, which gave her no inconvenience.

Abdomen.—There was some tenderness in right lumbar region, but the kidney could not be palpated. A thickening, as of glands, could be felt along the right Poupart's ligament. There was a feeling of resistance in hypogastrium. Percussion was tympanitic all over.

Owing to the extreme nervous temperament of patient, a satisfactory examination could not be made.

The vagina was narrow, barely admitting two fingers; the cervix scarcely to be felt; in the anterior fornix there was some resistance apparently connected with uterus.

When the abdomen had been opened, slightly to the side of the middle line, the condition was found to be a fibroid uterus. The ovaries were also fibrous.

The tumour mass was elevated with a myoma screw and delivered, the broad ligaments on each side were ligatured and divided, then the ovaries were removed. A peritoneal flap was made anteriorly and posteriorly, the uterus amputated through the cervix, and the peritoneum was sewn together with catgut. The abdomen was closed in layers with interrupted catgut sutures. The patient made an uneventful recovery.

Case IV.—The fourth specimen is a malignant uterus removed by vaginal hysterectomy. The diseased os and neck were very much enlarged and filled up the vagina. The operation was difficult, and the adhesions of the bladder were extensive. A blood clot presented in Douglas's pouch, which was scooped out and cleaned. Eventually the uterus was removed, but the ovaries were allowed to remain. All vessels were tied with silk, the ends left long. The vagina, after being gently douched and cleaned, was plugged fairly tight with iodoform gauze. For the first dressing a self-retaining rubber catheter was passed up into the bladder. The patient made an uneventful recovery, and the tear in the bladder healed up satisfactorily.

Clinical Records.

SUPPURATING OVARIAN CYSTOMA COMPLICATING MISCARRIAGE DURING THE THIRD MONTH.—OPERATION.—RECOVERY. (a)

By H. Macnaughton-Jones, M.D., &c.

The complication of a suppurating ovarian cystoma with pregnancy, though not of frequent occurrence, is occasionally met with. The suppuration is, however, more frequently attendant upon or a sequel of labour. A few years since I brought a case before the Obstetrical Society of London, in which, some time after parturition, I removed an enormous quantity of pus from a cyst, which had contracted extensive peritoneal and bowel adhesions, the patient making an admirable recovery. It is difficult to say why suppuration should occur more frequently in such cases than in uncomplicated ovarian cystoma. The condition of the blood in pregnancy may predispose to its occurrence. Pressure on the cyst and infection from the bowel may also tend to bring it about. In the present case there was no suspicion that the cause was ovarian until I saw the patient shortly before I operated. The case is interesting as having happened after a miscarriage about the fifteenth week of pregnancy.

On the evening of April 25th I was called in consultation to a patient who was dangerously ill, with the following history and symptoms. She was a primipara, æt. 35. There was a previous history of some lung trouble, and also of pelvic pain. On April 9th she had miscarried, and according to the report I was given the ovum and membranes had come away entire. There were no symptoms until April 20th, when she first complained of pain. Vomiting set in on the 23rd, and on the 24th there was great pain and difficulty in micturition. The vomiting continuing, and the temperature reaching 104°, and the pulse becoming feeble, I saw her. I found the abdomen generally swollen, tender to the touch, with a dull suprapubic area and attendant hardness. By vaginal examination I found the uterus fixed, the os uteri not patulous, and a considerable swelling in the utero-vesical space. There was no discharge. Her temperature had fallen to a little over the hundred, and her pulse was ninety. Ice was applied to the hypogastrium, and the quinine and opium she had been taking were continued. On the 26th she was in much the same state, the abdominal tenderness was diminished, there was very little sickness, but the hypogastric swelling had increased. On the 27th the evening temperature reached 102·4°, there was further abdominal swelling, but very little distress and no vomiting. The pulse had risen to 120. The question of abdominal interference arising, she was seen with me by Dr. William Duncan on the 28th, and we both took the view that it was a case of extensive cellulitis with some associated peritonitis following upon the miscarriage, and that at the moment there was no adequate indication for interference. On the 29th she was no better, and on the 30th, when I saw her, I found the vaginal swelling softer, and I thought I could detect some fluctuation. I accordingly determined, having first explored, to perform colpotomy on the following day, but prepared, if necessary, to open the abdomen. On May 1st I operated, and had the great advantage of Dr. William Duncan's presence and assistance. That was on the twenty-third day after the miscarriage, and the eleventh from the onset of her symptoms. After careful preparation of the vagina the uterus was dilated and explored, and nothing discovered. Under the anæsthetic I came to the conclusion that I could not satisfactorily reach any abscess by the vagina, and the best course to pursue was to perform cœliotomy. On opening the abdomen I found a cyst reaching almost to the umbilicus, and greatly distended. There were extensive adhesions all round the cyst wall, and some bowel and peritoneal adhesions. The breaking down of these caused considerable bleeding, and during the manipulation the cyst burst, discharging a quantity of pus. The cyst, which grew from the left side, was removed; the abdomen was flushed out with formalin solution, and then thoroughly sponged out with the same, before closure with through and through abdominal sutures. She progressed fairly for the first forty-eight hours, but on May 4th she became delirious, her pulse increased to 140, and her temperature remained at 101° and over. Her condition was so bad that it was thought useless for me to visit her, as she was for several hours unconscious. The bowel, however, responded well to an enema, and the respirations did not increase. She was having subcutaneous injections of strychnine at intervals, and nutrient enemata. On the night of the 5th she became again conscious, and still further rallied on the 6th, and though the subsequent course of her case was precarious, the temperature range showed nothing strikingly abnormal from May 14th forwards. When I saw her after a considerable interval, on June 16th, she had been up for some time, and was about to be removed for change of air.

The case is instructive, not only from the ætiological point of view, but also from that of diagnosis. It is not improbable that in some of these cases old pelvic diseased conditions, dormant during pregnancy, may be roused into activity by labour and the puerperal state, and cause infection of a simple cystoma.

(a) Read before British Gynæcological Society, July 10th, 1902.

In this case there did not appear to be anything wrong with the right adnexa. The mistake of looking upon the case as one of pelvic peritonitis with cellulitis was excusable under the circumstances, the uterus itself not being much enlarged though fixed, and supra-pubic area of dulness well localised. It is an instance of what I believe to be a safe rule (not without its exceptions) that in cases of doubt, when we have combined abdominal and pelvic signs, and when we are uncertain of being able to deal successfully with the case by colpotomy, to open the abdomen at once. Had I successfully explored this case as I intended to do with the trocar and branched dilator, I should in all probability have come to the conclusion that I had evacuated the pus from a large pelvic abscess, a conclusion which would have been followed by disastrous consequences.

Transactions of Societies.

BRITISH GYNÆCOLOGICAL SOCIETY.

Meeting held Thursday, July 10th, 1902.

Dr. Heywood Smith, a Vice-President, in the Chair.

FOUR CASES OF REMOVAL OF THE UTERUS.

Dr. F. A. Purcell showed the following specimens:—

1. A uterus with a submucous fibroid removed, for carcinoma, by vaginal hysterectomy.
2. A uterus also removed by vaginal hysterectomy after perforation of the fundus during dilatation for the purpose of extirpating the pedicle of a fibrous polypus previously expelled.
3. A uterus with multiple myomata removed by the abdomen.
4. A uterus removed for malignant disease adherent to the bladder.

The detailed notes will be found on page 83.

Dr. Heywood Smith pointed out that though the first specimen had been removed on the opinion of a pathologist that the scrapings of the endometrium indicated malignancy, this opinion had not been confirmed after the operation, and to the naked eye the tumour appeared to be an ordinary submucous fibroid assuming the polypoid form. There was a question whether there was any malignant disease or not, and if not, though, as the vagina was a small one, the operation might have been difficult, the tumour might have been enucleated and the uterus preserved. It would be interesting to know whether the curette had passed beyond the tumour and up to the fundus, or not.

Dr. Routh attached much importance to the carunculæ of the vagina being indurated, as an early indication of malignant disease higher up; if that hardness was well marked it would seem very probable that the present case was really one of malignant nature.

Dr. Purcell agreed that where, as in the case before them, the carunculæ were hard and tender, the presence of some malignancy higher up was indicated, and upon that evidence and the report upon the scrapings of the curette he had no alternative but to remove the uterus. He was quite sure that he had obtained some endometrium from above, as well as from below, the fibroid, and that the curette had reached the fundus.

Dr. Heywood Smith (the Chairman) said, in regard to the second specimen, in which the uterus had been perforated, that the fact that the woman had had nine children beside miscarriages, was of importance, as so many pregnancies were likely to weaken the uterine contractile tissue and increase the liability to perforation. Great care and very little pressure should be used in passing a sound into a uterus which had borne many children. It would be desirable for the Fellows present to give any experience they had had of perforation of the uterus; no doubt it occurred much oftener than was recorded He had himself in one case felt the sound through the abdominal wall; Dr. Meadows, a good many years ago, had a case at the Hospital for Women in which the sound was passed through the fundus; no harm happened beyond temporary pain, and neither patient was materially inconvenienced by the accident.

Dr. Routh had heard of many instances of perforation of the uterus; it had occurred twice in his own practice, but no bad effects followed. A late colleague of his had met with the same accident, and the patient died. He thought the new methods of dilatation not free from danger, though more rapid than the old-fashioned one. At the same time he had not heard of a single death due to dilatation, and in the hands of those with very large experience, like Dr. Purcell, it was a different matter from the same proceeding in those of an unskilled person, but it was a question whether it would not be better for the gynæcologist not to be so careful of his time and continue the old plan of dilatation by tents.

Dr. Macnaughton-Jones said he would like to know from Dr. Purcell if the dilatation had been gradual. He disliked the term "forcible," as applied to dilatation, as force was just what should be avoided in carrying it out. The method of dilatation was frequently indicated by the nature of the uterus we had to dilate. In the instance of a soft cervix with a patulous canal and a yielding isthmus, gradual dilatation by any form of bougie was generally easily effected, but in other cases he much preferred the plan of using an antiseptic laminaria tent beforehand, taking it straight from ether and iodoform, and subsequently—say within the twenty-four hours—completing the dilatation by some form of dilator. The tent usually enabled us readily to dilate the cervix to the circumference of the little finger before passing larger instruments. Again, the degree of dilatation depended upon the object. In some cases it was not necessary to dilate to the full extent, as exploration by the finger was not required. He had never had any accident from dilatation, by any method. Neither had he had any accident with the uterine sound. On two occasions, the sound had passed out of the uterine cavity. He had recorded this fact, but it was due to the presence of an enlarged uterine orifice of the Fallopian tube, into which the sound passed. This was due to the condition which Matthews Duncan had drawn attention to in explanation of the sound into the abdominal cavity in certain cases without penetration of the uterine wall. There was neither pain nor shock. The readiness with which the uterus could be perforated by the sound depended upon the nature of the uterine structures. All were familiar with a condition in which the uterus was frequently elongated, and in which the wall was exceptionally thin and soft, or some degenerative change had taken place. Here the greatest caution had to be observed or the sound might very easily be pushed through the uterine parietes, and the same might be said of any form of dilator. On the other hand, in a normal uterus or one with hypertrophied walls, such risk was not present. A serious question might arise as regards the responsibility of a surgeon perforating the uterus with a sound or dilator. With proper caution it was not an accident which was likely to occur save under exceptional conditions. Given a normal uterus such an accident, he was afraid, would be attributed to some rashness on the part of the surgeon, but not otherwise. It could be easily understood how a sound that was aseptic might penetrate the uterus and do but little damage. It would be different if it carried any septic material into the peritoneal cavity, and therefore the risk must, in a certain degree, depend upon the condition of the uterine canal, as the principal danger would arise from septic peritonitis.

Dr. Herbert Snow reminded the Fellows that Lawson Tait, one of their late Presidents, was the first to call attention to the rather frequent passage of the sound through the uterine wall without any bad results, and in his book on abdominal surgery he mentioned a number of cases of the kind. If the sound or dilator were sterile no harm was in the least likely to happen. Dr. Purcell might remember some ten years ago, when assisting him (Dr. Snow) to perform a ventral fixation, and at his request pushing up the uterus with a sound, the instrument passed through the wall and made its appearance below the umbilicus. It was withdrawn, the operation was proceeded with and no ill-effects whatever followed. A milder method of treatment might have answered in the present case, as in instances of rupture of the uterus in labour; the pedicle might have been removed and a gauze packing inserted.

Dr. Purcell, in reply, said that as the uterus had already expelled the polypus he had no hesitation in dilating to remove the pedicle. He had reason to suppose the pedicle to have become twisted and to be in a sloughing condition, and it could not safely be left in the cavity. If an aseptic sound passed through a healthy uterine wall, as in the case Dr. Snow had referred to, naturally no harm would result. Though he had dilated very many uteri, he had not seen many cases of perforation, and some years ago he might not have attempted vaginal hysterectomy, but have simply inserted a gauze plug for drainage. He did not know whether the uterus in this case was malignant or not, but there was a sloughing polypus outside, and the pedicle was in the cavity; it was clear that the uterus could not be considered aseptic, and therefore he performed hysterectomy. He was sure that all the Fellows agreed with Dr. Routh as to the use of tents, at all events for preliminary dilatation. In this case the os was patent; he had dilated very gradually, commencing with No. 1; there was no difficulty in introducing the early numbers, and it was No. 9 that went through the wall with the application of very little pressure. It was owing to what Dr. Macnaughton-Jones had told them when exhibiting Professor Bossi's very ingenious instrument that he had brought the case forward, as he thought that by that instrument, after preliminary dilatation by a tent, the cervix in this case might have been dilated to the required extent without accident.

Dr. Macnaughton-Jones read notes "On a Case of Suppurating Ovarian Cystoma complicating Miscarriage during the Third Month," which will be found under "Clinical Records," page 84.

Dr. Snow asked what was the strength of the formalin solution used, and what Dr. Macnaughton-Jones' experience had been as to the effects of formalin on the peritoneum. It had generally been considered a mistake to use any irritant in the abdominal cavity from fear of damaging the secretory and excretory powers of the peritoneum.

Dr. Purcell said the case was instructive as an example that in attempting to open a pelvic abscess one must always be prepared to perform cœliotomy. So also in regard to vaginal hysterectomy; he had seen a large ovarian cyst removed, after the uterus, by the vagina, and pyosalpinx taken away with the uterus, but complications were met with, and it was sometimes necessary to do the double operation. If there was any difficulty from adhesions or thickening in removing a uterus by the vagina, it was better to open the abdomen and see what one was doing. He was in the habit of using formalin in solutions of from a half to one per cent.

Dr. Macnaughton-Jones, junr., said, that with the exception of hydrogen peroxide, formalin was the least irritating of all the antiseptics in use; without any untoward effects it might be injected into the veins in sufficient strength to destroy tubercle bacilli in the blood. Its effect on the peritoneal cavity was therefore not likely to be injurious, nor, practically, had it been found so.

Dr. Macnaughton-Jones, in replying, said that the uterus, as he had stated, was fixed. There was no question of diagnosis, except that of pelvic suppuration, which was negatived by the discovery of the ovarian cystoma. The case was a very puzzling one, as there was no indication whatever of any uterine complication, all the products of gestation had completely come away, and the gradually increasing swelling closely resembled the spread of perimetritic inflammation. With regard to the question of formalin, he had for some years been in the habit of using it constantly in solutions of from 1 in 2,000 to 1 in 5,000, for a variety of purposes, and had never had the least ill effect from it. Used in proper strength he believed it to be the most perfect and harmless antiseptic we could employ.

For Dr. Purefoy, Master of the Rotunda, Dr. Macnaughton-Jones, junr., read notes (with specimens) of (1) "Tubes and Cystic Ovaries from a Rudimentary Uterus." (2) "Secondary Growth from the Abdominal Cicatrix after Hysterectomy," which will be found on page 80.

Dr. H. R. Hodgson read a paper on "A Case of Double Pyosalpinx removed after Seventeen Years' Suffering," which we hope to publish in an early number.

BRITISH LARYNGOLOGICAL, RHINOLOGICAL AND OTOLOGICAL ASSOCIATION.

Meeting held Friday, July 11th, 1902.

Dr. Macintyre, President, in the Chair.

Dr. Wyatt Wingrave read notes of a case of

BILATERAL ADDUCTOR PARALYSIS

in a boy, æt. 7.

Mr. Lennox Browne inquired if adenoids were present, or any symptom pointing to reflex disturbance?

Dr. Dundas Grant said he had seen the patient, and found the larynx normal in every respect. He regarded the case as one of hysterical aphonia.

Dr. Dennis Vinrace asked if there had been a tendency to relapse?

Dr. Wingrave, replying, said he had removed adenoids; one application of the interrupted current quickly restored the voice.

Mr. Lennox Browne read notes of a case of

KERATOSIS OF THE TONSILS

without leptothrix in a young adult. He had removed the tonsils, of which Dr. Wyatt Wingrave now showed microscopic sections.

Dr. Wingrave described two varieties of tonsillar keratosis, one in which the horny growth projects through the open mouth of the crypt; the other where, the orifice being closed, the horny epithelium forms a "perle" in the lacuna.

Dr. Dundas Grant remarked that the condition is apt to disappear without apparent cause.

After some observations by Mr. Chichele Nourse, Dr. Jobson Horne, and the President, Mr. Lennox Browne and Dr. Wingrave replied.

Dr. W. H. Kelson showed a case of

TUBERCULOUS TRACHEITIS.

The patient, whose two brothers died of phthisis, has congestion of the larynx and ulceration at the upper and anterior part of the trachea. The sputa contained quantities of tubercle bacilli.

Dr. Kelson also read notes of a case of singer's nodes on both cords in a choir-boy.

Dr. Dundas Grant showed a case of

CONGENITAL PAPILLOMATA OF THE LARYNX

in a girl, æt. 23, who had worn a tracheotomy tube from infancy until the time she consulted him four weeks ago. Her voice then resembled that of functional aphonia. The lips and tongue moved, but there was no phonation. Dr. Grant removed the papillomata with forceps and snare, and cleared the larynx, so that the patient was able to breathe through the natural channels. Later he closed the tracheal wound. The patient has now a fair voice.

Mr. Lennox Browne congratulated Dr. Grant upon the result. The patient, who was before voiceless, can now utter a good vowel sound. He could recall only one similar case. In that instance it was some time after the removal of the papillomata before the patient was able to speak.

Dr. W. H. Kelson pointed out that the case was evidence in support of the view that tracheotomy alone was not curative in cases of papillomata of the larynx.

After a few remarks by the President, Dr. Grant replied.

Dr. Dundas Grant showed a bent glass tube of a form devised by Dr. Leduc, of Nantes, for enabling a patient to apply powders to his own larynx.

The President showed (1) Photographs of the new electrical department at the Glasgow Royal Infirmary. Besides apparatus for X-rays and high frequency currents and a very large static machine, there is a huge and very powerful electromagnet for removing foreign bodies from the trachea, &c. (2) Photographs of a case of cancer of the nose in a woman, æt. 60. Two months ago an old wart took on a very rapid growth. On removal of the external mass it was found to have penetrated the cartilage and to be invading the tissues inside the nose. The case is now under treatment by the X-rays.

Germany.

[FROM OUR OWN CORRESPONDENT.]

Berlin, July 19th, 1902.

Resorbent Pills (Ichthyol Salicylate Pills).

A communication by Dr. B. Rohden appears in the *Therapeut. Monatsch.* du Ichthyol Salicylate ; " 50 per cent. pills ichthyol salicylate is a new compound made by the Ichthyol Gesellschaft at the author's suggestion. These pills have an extraordinary power of resorption, it is said, that make them of great service in commencing atrophic processes and for relief of inflammation in various organs. In tuberculous affection of the lungs, in old pleuritis and in the treatment of rheumatic and other arthritic affections they are said to be valuable. Ichthyol has the property of contracting blood vessels and in combination with salicylic acid, which also has this property in small doses, its value is enhanced. The pills have also been used with good effect in Bright's disease and in diabetes. The author recommends that a little effervescing alkaline water be drunk at the time the pills are taken. In the case of uric acid arthritis the treatment may be continued almost for indefinite periods with brief intervals of rest. One pill three times a day should be the initial dose, and this may be increased and should be on occasion to three thrice daily. The author claims that this preparation will bring about a *restitutio ad integrum* in cases of subacute and chronic inflammation, and where contractions are going on. The ichthyol salicylate combined with a suitable soap may be also used for inunction.

Peritoneal Adhesion after Laparotomy.

A paper by Dr. Karl Vogel appears on this subject in the *Discu. Ztech. f. Chir.* The occurrence of five cases in the practice of Schede of recurring adhesive peritonitis, four of which proved fatal from ileus, led the author into a special study of the subject. He first gives the history of the five cases, and then goes on to the question of the ætiology of the peritonitis, which he attempts to clear up by aid of animal experiment. Certain factors were found in the experiments named, and placed in the following order: (1) hæmorrhage from intraperitoneal wounds; (2) mechanical irritation and injuries, especially when they are near the laparotomy wound; (3) cauterisation, especially when it has been so intense as to prevent union by first intention, the eschar acting as a foreign body; (4) foreign bodies; (5) chemical irritations; (6) infections. He then endeavoured to indicate the most suitable measures to be adopted in order to avoid these dangerous adhesive inflammations. The most important measure is to avoid allowing the intestine to remain still, a thing which always threatens when the abdomen has been opened, and especially when the adhesions have existed before. For the occurrence of such adhesion it is first of all a condition that two opposing surfaces of intestine shall remain quietly in contact with each other for some time, and to avoid this the intestines must be kept on the move. With this object he gave the animal operated on and in the case, a young girl, physostigmin salicylate commencing soon after the operation. The medicine was given subcutaneously, and for the first three days after the operation, the result being good. It is also advisable in the human subject to change the patient's position early and frequently; animals make these changes of themselves, and the effects of them are good. Massage also should be begun as soon as circumstances allow, in order to do away with any ill-effects following from adhesions that may already have taken place. A further measure is the prevention of contact between different parts of the abdominal contents by filling the abdomen with a suitable fluid, and particularly about the abdominal wound. According to the author's experiments, the most suitable fluid was a solution of gum arabic in common salt solution. Mucin also possessed some useful properties, but it decomposed too rapidly. His experiments with physiological solution magn. sulph. and white of egg albumen were not successful.

At the Medical Society Hr. Karewski brought forward the subject of

Diffuse Adhesive Peritonitis after Appendicitis.

Such peritonitis was generally limited to the parts adjoining the appendix, but although rare general peritonitis might occur, and it was very dangerous. The clinical symptoms were mostly disturbance of function which might go so far as to represent chronic or subacute ileus. During the past ten years he had had thirteen cases of adhesive peritonitis. Three cases of total obliteration of the abdominal cavity following perforation not operated on; an artificial anus was made in two cases, but all died in a short time.

Four cases of appendicitis that at first appeared to be doing well after operation. One case died. In the three other cases the adhesions were so extensive as to justify the expression " general adhesive peritonitis."

Two cases of doubtful ætiology. In one, the case of a boy, tuberculous peritonitis was the diagnosis, but only a general adhesive peritonitis was found, the adhesions being thickest around the vermiform appendix. A girl had bladder disturbances a long time, the significance of which was long in being made out. The boy died; the girl recovered.

Two cases with long-standing fistula. Both cases were operated on, but died.

The most certain way of avoiding these forms of peritonitis is to remove the appendix as early as the case admits, when it has once become the centre of suppurations.

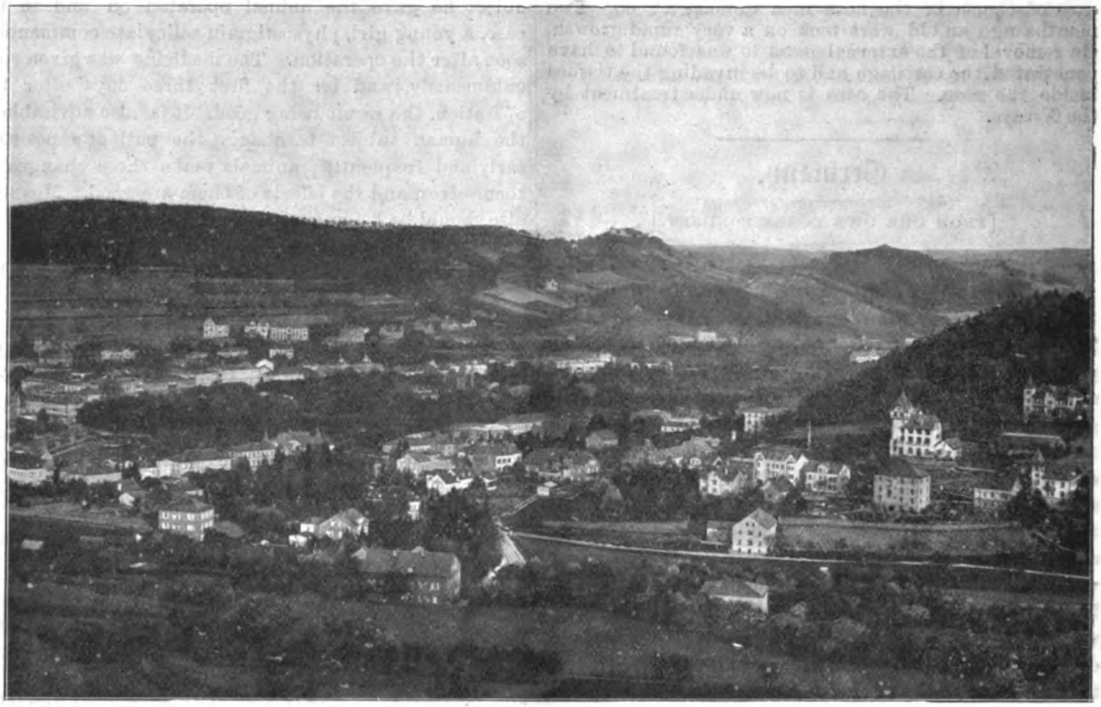
Austria.

[FROM OUR OWN CORRESPONDENT.]

Vienna, July 19th, 1902.

Pharyngotomy.

At the " Gesellschaft der Aerzte," Büdinger showed a male patient on whom he had operated for cancer of the throat, by removing the epiglottis and contiguous parts. He related Heindl's experience, who performed an endo-laryngeal operation for a similar condition with unhappy results. Büdinger said that he commenced by having a tube inserted into the stomach through the nose, but this caused such a catarrhal and even purulent discharge, that it had ultimately to be withdrawn.



After this the patient soon learned to draw the open parts together, and so fix the hyoid bone with the surroundings that deglutition could be carried on without an instrument. Taste was unaffected, although the voice was irreparably lost.

The prognosis of this operation is not encouraging, as only thirteen cases of epiglottal carcinoma were placed on record, ten recovering, while three died. These cases were simple epiglottal, but if the surroundings were involved the results were more pronounced, such as in eleven cases, where seven died, while four recovered.

Eiselberg said that he has operated for cancer of the epiglottis by extirpating the larynx altogether with perfect success. In one case he had a recurrence where one of the glands that had become infiltrated was left and formed a centre for recrudescence. He disagreed with Büdinger as to tracheotomy being a prophylactic. He believed also that the nasal tube was a bad practice, as it produced rhinitis at a very early period.

Continental Health Resorts.

[FROM OUR SPECIAL CORRESPONDENT.]

KISSINGEN.

The new management, inaugurated last year at Kissingen, has proved itself efficient and successful. This year the season commenced, and has continued, with a throng of patients and visitors largely in excess of prior seasons, and the high social rank of many of its guests is in accordance with its title of "Royal Baths of Kissingen."

The improvements introduced are visible everywhere—in the Baths, the Royal Kurhaus Hotel, the Kurgarden, and the town. All around the place progress predominates, and promises increasing popularity and prosperity. The picturesque vicinity of the town is much in its favour. Excursions on all sides offer attractions to tourists. The fishing facilities are well known to the disciples of Izaak Walton, the river Saale (running by the town), having a good supply of pike, barbel, chub, &c.; while ten miles away, at Neustadt, is excellent trouting. Fishing is a favourite amusement here.

The indications for treatment at Kissingen are dyspepsias of all kinds, gastric catarrhs, liver maladies, spleen stoppages, abdominal disorders, obesity, fatty heart, scrofula and habitual constipation. To these some German authorities add gout, rheumatism, anæmia, and pulmonary complaints.

Of the many mineral springs, three (the Rakoczy, the Pandur, and the Maxbrunnen) are used for drinking; and two (the Soolsprudel and the Schoensbornsprudel) principally for bathing.

The Rakoczy is the spring which has chiefly gained for Kissingen its renown. This water is usually drank in the morning, fasting, in glasses of 250 grammes, and is generally taken cold. The quantity prescribed varies according to the malady and the patient's condition. For stomachic affections four glasses are considered sufficient; for difficult digestions, hepatic congestion and obesity, eight glasses, *i.e.*, four before breakfast, and four in the evening, either before or after dinner. Between each glass of Rakoczy water it is advisable to promenade for fifteen minutes.

The Maxbrunnen Spring is also exclusively employed for drinking. It is preferred for children to the Rakoczy; drank alone or mixed with the milk of cows or goats.

The Maxbrunnen is much preferred for scrofula. It is then taken, fasting, in the morning (the doses varying according to age) from one to four glasses. Again, at ten o'clock, one or two glasses; and in the evening one or two glasses of the water added to half the quantity of goat's milk. Some think a better effect is produced by drinking the Rakoczy in the early morning and the Maxbrunnen at ten o'clock and in the evening.

In addition to baths of the Soolsprudel and the Schoensprudel, there are given at Kissingen mineral mud-baths and mineral gaseous baths. And here are also a variety of hydrotherapic arrangements, pneumotherapic cabinets, inhalation rooms, vapour baths, &c. The baths are mainly relied upon for lymphatism, scrofula, skin diseases, gynæcological cases, and habitual congestions of the nervous centres.

The season runs from April to October; and as an "after cure" the resident physicians find the neighbouring iron-water springs at Bocklet efficacious.

These springs at Bocklet are amongst the finest chalybeate waters of Europe. The temperature at Bocklet is unusually equable and the atmosphere highly ozoniferous. For anæmia and hysteria this small health-station is strongly recommended, and for convalescents generally.

OPENING OF THE NEW OCHIL HILLS SANATORIUM.

ON the invitation of the Directors of the Sanatorium a large and representative company of ladies and gentlemen were conveyed by special train from Glasgow, on the 16th inst., to Milnathort, where a large number of brakes were waiting to take the company to the Sanatorium some distance off. Among those present were Sir Thomas Glen Coats, Surgeon-General Pinkerton, Professors McCall Anderson, Glaister, and Murdoch Cameron, Dr. Ebenezer Duncan (chairman, Board of Directors), Mr. Quarrier (of the Bridge of Weir "Homes"), Dr. Fraser (Paisley), Drs. D. C. McVail, Alex Robertson, T. K. Monro, Thos. Laprink, D. Tindal, A. S. Tindal, J. Hamilton, D. Couper, W. Frew, Thos. Richmond, &c., &c. On arriving at the main entrance to the Sanatorium, Dr. Duncan, in a short but graceful speech, extended a very hearty welcome to the visitors. Thereafter Dr. Fraser, in a few appropriate and neat remarks, presented Miss Coats, in the absence of her mother, Lady Glen Coats, from indisposition, with a beautiful key of unique workmanship, and a facsimile of one found in Loch Leven, which has much historical or legendary interest attached to it. Miss Coats, key in hand, then opened the door and allowed the large company to go on a visit of inspection through the whole of the Sanatorium, which is extremely well-equipped with every appliance for the treatment of tuberculosis. The inspection over, the company, to the number of 200 to 300, sat down to a *recherché* luncheon, over which Dr. Duncan presided. Several toasts were proposed, which called forth some good speeches from the Chairman, Professor McCall Anderson, Surgeon-General Pinkerton, and others. The Sanatorium has been built at a cost of £35,000, and occupies one of the finest sites in Europe, and will probably compare very favourably with Sir Lauder Brunton's Model Sanatorium, recently described. The Ochil Hills Sanatorium has been specially built for its purpose on an elevated plateau having a dry and gravelly soil, 800 feet above sea level, and has its exposure to the south. It comprises sixty bedrooms for patients, with the windows opening quite noiselessly to the outside and allowing the rooms to be flooded with air and light; at the same time the window frames are a protection against strong winds. Balconies are dispensed with, so as to ensure the very free access of air and light to the rooms, all of which communicate with long and spacious corridors. The grounds extend to 460 acres, and the surrounding scenery is picturesque and grand. The county in which the sanatorium is situated has the smallest death-rate from pulmonary consumption of any county in Great Britain. For treatment the equipment of the Sanatorium includes an inhalation room, provided with an electric motor for driving the spray apparatus, and an electrical room with an installation comprising a powerful Röntgen ray and high-frequency current apparatus, and an induction coil arc lamp for ultra-violet light.

The Sanatorium is now ready to receive patients, of whom, we understand, a number have been booked for some time. Apparently it is going to meet a much-felt want.

The Operating Theatres.

TOTTENHAM HOSPITAL.

ABDOMINAL MYOMECTOMY.—Dr. A. GILES operated on a woman, æt. 41, who had been admitted on account of an abdominal tumour. This interfered greatly with her occupation, which was that of a hospital nurse, and it also caused her a great deal of pain. The tumour was very hard and a diagnosis of myoma was made. On opening the abdomen the tumour was found to consist of a large pedunculated myoma springing from the anterior aspect of the fundus; as there were no other growths it was decided to leave the uterus and to remove the tumour alone. Accordingly an incision was made round the pedicle and the attachments of the tumour enucleated. The peritoneal flaps were brought together by interrupted mattress sutures, after which the peritoneal edges were sewn over with a continuous suture of fine silk. The uterus was fastened under the abdominal wound with the object, as the operator remarked, of rendering the uterine wound easily accessible in the event of any hæmorrhage occurring. The abdomen was then closed in the usual way. The tumour was the size of a fœtal head, and on cutting into it, it showed extensive cystic degeneration in its central portions. Dr. Giles remarked that sub-peritoneal myomata were especially prone to degenerative changes, which together with pressure on adjoining organs constituted the two chief complications of this kind of growth; in contradistinction to this, the chief troubles caused by intra-uterine myomata were hæmorrhage and septic absorption due to sloughing and to infection through the vagina. The operation he had just performed was a typical example of the procedure of abdominal myomectomy in the sense in which he had recently defined it (see the report of a case of abdominal hysterectomy for myoma in THE MEDICAL PRESS AND CIRCULAR, July 16th, 1902), in contradistinction to the two methods of removing myomata from the substance of the uterine wall and from the uterine cavity respectively. All three were conservative procedures. It was not always possible to tell before commencing operation which plan would prove the most suitable, but there were, he considered, certain general indications that might serve as a guide: thus, with a large smooth uterus whose general shape was like that of a pregnant uterus, and when hæmorrhage was a prominent symptom it was probable that the case would lend itself to an abdominal hysterotomy; when the hæmorrhage was a less prominent feature and the smooth outline of the uterus was interrupted by one or two prominent bosses, it was likely to be a case for enucleation, but when there was no unusual hæmorrhage, and a tumour could be felt tolerably distinct from the uterus, a myomectomy might be contemplated; lastly, when multiple growths were present it was unlikely that any of these conservative methods would be applicable, and hysterectomy would probably be required.

Convalescence in this case was somewhat delayed by an abscess in the abdominal parietes, which was attributed to an infected suture; the abdominal wall in this woman contained an unusual amount of fat of low vitality, which conduced to this result. The abscess cavity healed up without causing further trouble; the patient then made an uneventful recovery.

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"SALUS POPULI SUPREMA LEX."

WEDNESDAY, JULY 23, 1902.

THE MENTAL RESPONSIBILITY OF CRIMINALS.

Penal legislation always lags far behind the progress of psychology, and perhaps it is well that it should be so, since the data afforded by this science are often open to criticism. Nevertheless the punitive theory of punishment has undergone very considerable modification during the last few decades, and a more scientific and social spirit has been infused not only into our penal legislation, but also into the judicial administration thereof. To assert that the conception of right and wrong is an extremely variable quantity as between the individual units of a community is to formulate a truism, but the inevitable corollary of this view is that individual responsibility is subject to precisely similar variations. The limits of these variations are extremely wide, between an ideal conception of duty on one hand and the irresponsible lunatic on the other—and there is no strict line of demarcation between the obviously irresponsible and those who may be termed the quasi-irresponsible. Wherever we meet with instances of the commission of grave crimes for obviously inadequate objects this partial absence of the moral sense forces itself upon our notice, and in the thoughtful excites disquieting reflections. It is especially in murder cases that the lack of proportion between the crime and the motive is most striking, and the very magnitude of the crime creates a suspicion of an initial and fundamental defect of mental equilibrium. To take concrete examples: when a man assassinates a bank manager in order to obtain possession of a large sum of money we may conclude that the man is an intelligent criminal; but when, as so often happens, a man of low intellectual calibre, in a fit of maudlin jealousy or disappointment, wantonly kills under circumstances which render his immediate arrest a matter of certainty, surely this fact is presumptive evidence of a disordered mind. Society possesses, and is entitled to exercise, the power to prevent the latter class of criminals from jeopardising the harmony of social life, but to inflict the death penalty merely because the crime took the form of murder is illogical and scientifically unjustifiable. These reflections are prompted by several recent trials for murder in which a verdict of guilty was followed by the capital sentence, although most medical men would not hesitate, on reflection, to conclude in favour of what we may term a mitigated responsibility. The mischief arises from the popular conception that moral irresponsibility is necessarily associated with some other outward and visible manifestation of mental disease the brain a single complete organ, instead of a composite structure any department of which may be functionally defective without involving the other centres or group of centres. Moreover, if sanity may be defined as a state of harmonious equilibrium between the higher nerve centres, insanity and the various degrees of deficiency in the moral sense may be defined as manifestations of a lack or disturbance of that equilibrium, and this entails a modification of the penal responsibility in the individual case. The logical outcome of these arguments would be the obligation on juries and judges to take account of the apparent motive of the crime, marked want of proportion between the cause and the effect being accepted *per se* as evidence of a partial absence of responsibility. In reality, we are only arguing against the routine infliction of the death penalty for murder, for it would remain none the less necessary to place such individuals under restraint in the interest of society at large; in other words, we would plead that the spirit which now animates the treatment of confirmed inebriates, regarding inebriety as a disease rather than a crime, should be extended to offences of greater magnitude.

BATHS FOR THE PEOPLE.

"THE Englishman's tub" is almost a national institution. The average Englishman considers his morning bath an essential part of his daily toilet. Probably in no other country is the importance of thorough ablution more clearly recognised. A bath-room is a necessary part of every modern house. Most English hotels provide elaborate arrangements for bathing. But while England generally is considered to be in advance of most European countries in bath provision, we are far behind the ancient Romans, who elaborated bathing from a hygienic necessity into a wasteful and enervating luxury. But even in this country the habits of bathing are to a great extent of recent development. In London and in most of our ancient cities many of the best houses built in the eighteenth century and earlier part of the last century are devoid of bath-rooms or altogether inadequately supplied with accommodation for bathing, and facilities for perfect cleanliness among the poor are still meagre and insufficient. Of recent years the movement to provide "people's baths" has been quickly growing and gathering force. To erect swimming baths is an expensive matter, which of necessity can only be accomplished by municipal or collective action, and hence such are almost confined to those districts where large numbers of people congregate. But the provision of spray and shower baths can be met at a comparatively small outlay, and is well within the means even of a small parish. Undoubtedly the most suitable bath for cleansing the working classes is the spray and shower bath. Such have been provided by many employers of labour in connection with their mills and factories. Mr. Walter W. Thomas, in the current number of the *Public Health Engineer* (July 12th, 1902), shows that the shower and spray bath originated in Germany; the first establishment to attract attention was erected in the barracks of the Kaiser Franz Grenadier Regiment of the Guard in Berlin in 1878. It cost £200, and was capable of bathing 300 men per hour. The term "People's Baths" in the United States is generally known to refer to public baths which are provided with spray and shower, but having no swimming, bath. Such have been constructed in many German and American cities. We hope England will quickly follow such excellent examples. Already shower and spray baths have been introduced into several existing and new public baths, and we understand the Liverpool Corporation have erected in one of the poorest districts of the City, and in close proximity to the docks, a complete installation of people's baths. In Lord Rowton's model lodging-houses admirable baths are provided at a very small charge, and the use of the foot bath is allowed without additional payment. We could wish that in connection with all municipalities, and even in country villages, simple shower and spray baths could be provided for both sexes. Perhaps the day will not be far distant when our excellent metropolitan lavatories will be able to add this additional hygienic agent to their outfit, thereby supplying another valuable influence making not only for comfort but for health. Undoubtedly the provision of people's baths affords the best means of securing greater cleanliness at a minimum of expense. We commend the movement to the careful attention of all humanitarians and hygienists.

THE LIFE-COST OF THE PANAMA CANAL.

IT has been suggested in some quarters that young Englishmen might find it worth their while to go out to the isthmus when the United States Government starts operations on the works it has recently acquired from the French company, as Americans show no inclination to face the fever-stricken climate of those parts. Though the danger is nothing now to what it was when the enterprise was initiated by the original company, the climate is in no way suitable to the average European, and less so to the full-blooded, athletic Britisher than to any other. It is, of course, when the bush is being cleared and the virgin soil disturbed that the danger of yellow fever is greatest; the early days of the canal offer a striking example of this. At that time every train run to the various sidings had an empty waggon at the end, into which the dead were thrown as they were found along the permanent way. At Colon niggers and Chinamen would crawl down at night and sleep on the beams under the shipping wharves, and in the morning it was no unusual thing to find several of them dead. It is said that every sleeper of the American Trans-Isthmian Railway cost a life; this is probably only a picturesque exaggeration, but reduced to truthful proportions the facts are appalling enough, and the cemetery at Monkey Hill, a few miles outside Colon, is eloquent as to the expenditure of human lives involved in the starting of this great enterprise. These considerations weighed not a little with the United States, in deciding the Government to purchase the Panama works, rather than to start another canal, which would have meant the opening-up of new country with all its attendant evils. But even to-day yellow fever is endemic in Panama, and hardly a week passes during which there are not two or three deaths from this disease, mostly among foreigners, especially among new arrivals. Malaria in its worst forms exists all the year round throughout the isthmus, and indeed all along the coast of the Caribbean Sea. The climate is damp and enervating, and the heat overpowering. Moreover, Panama and Colon, respectively on the Pacific and Atlantic sides, are hemmed in by bush, there are no roads for rides, drives or walks; the day's work over there is nothing to do, nothing to see, and the lonely man seeks the gaming or drinking saloons out of sheer ennui. Salaries and wages run high, will run higher still in the near future, but at their highest will hardly be in proportion to the expenses of ordinary life and the risks involved. It is not astonishing to hear that the average American is not disposed to exile himself to such a place, but

great as is the bond of good fellowship which unites us to our Transatlantic cousins, where they are reluctant, it is surely not reasonable to encourage Englishmen to tread, and it would be folly to build up with English lives an enterprise, however great of which in the future the United States alone will reap the benefit.

Notes on Current Topics.

A Physicians' Corner for Westminster Abbey.

The healing art is carried on in silence, and much necessarily in secrecy. Practitioners of medicine have always shunned mere meddling praise. Doctors, although valued in private life, have rarely taken a prominent part in public work. The profession has ever been jealous of its reticence, and always looks askance at any movement which seems to seek a success necessitating the gaining of public opinion. Court recognition or national approval until recently has been but exceptionally bestowed. In the press or on the platform medicine but rarely claims a place. Even now any attempt to lead popular opinion except through professional channels is often discouraged. The leaders of the profession have ever been slow to countenance efforts seeking to raise the status of practitioners and to accord to members of the profession national recognition. And this spirit of effacement has had its effect. The nation has been slow to recognise the value of the services of those who accounted their own services lightly. Divines, warriors, poets, musicians, and men of letters have ever been accorded a high place in the nation's esteem, but the representatives of medicine have until recently received scant honour. This is strikingly evidenced by a reference to such a work as that just published by Mrs. A. Murray Smith, "The Roll Call of Westminster Abbey." The Abbey is the revered Shrine of England's honoured dead. But among the illustrious dust there are but few who once might have exercised the divine right of healing. There is no Physicians' Corner at Westminster Abbey. Monuments to physicians are few and far between. In the south transept is a cenotaph to Sir John Pringle, the favoured Court doctor of George II. In the north choir aisle is a monument to John Plenderleath, who was physician to the forces in the field under Wellington. Edward Wetenhall, another medical man, lies by the side of his father, the Bishop of Kelmore and Ardagh. Dr. Woodward, whose name is kept in remembrance at Cambridge in connection with the Woodwardian Museum, lies buried in the nave close to the illustrious Newton. Thanks to the efforts of the lovable Frank Buckland, the remains of the great John Hunter sleep in the silence of the Abbey. In St. Andrew's Chapel is the bust of John Hunter's nephew, the great morbid anatomist, Matthew Baillie. Thomas Young, although chiefly remembered as a physicist, was also a physician, and Chantrey's beautiful medallion stands for his record. Mead, the great physician of George II., also rests in the Abbey. There is also a bust to Sir James Y. Simpson, the introducer of chloroform. And it must not be forgotten that Charles Darwin, the great biologist, lies near Herschel and Newton. But when all are told the memorials which medicine can claim are comparatively few and meagre. We venture to think that both the profession and the public in the coming years will realise more clearly the duty and privilege of granting honour to those to whom honour is due.

The Health of Schoolgirls.

The schoolgirls of to-day will be the mothers of tomorrow. In the maintenance of national efficiency *puellaculture* should play a leading part. Arguments have recently been advanced for "a periodical stocktaking of our children throughout the country." If this could only be carried out on scientific lines much good might be accomplished. In these days of strenuous educational efforts it is most necessary that trustworthy data should be forthcoming regarding the influence of school life upon the health of girls. Dr. W. B. Drummond deals with this subject in the current number of the *Scottish Medical and Surgical Journal*. It is interesting to note that the only years in which the death-rate of females is as great as that of males are those in which girls are at school and those immediately succeeding the period of school life, in which any evil effects of school life would become manifest There are great discrepancies in the statistics relating to sickness in schoolgirls. Mrs. Henry Sidgwick some years ago sought to procure accurate health statistics of women students at Cambridge and Oxford. She gives the following percentages of English girls as being in poor or indifferent health: 3 to 8 years of age, 11·57; 8 to 14 years of age, 10·13; 14 to 18 years of age, 10·89. There are grounds for believing that permanent damage may be wrought when at the appearance of puberty excessive strain is often thrown on the system by the objectionable cramming methods of our educational system. No one can doubt but that much in our secondary and collegiate courses of training go far to unfit girls for their high office of wives and mothers. Certainly the girl athlete of to-day is doing her best to reverse matters, at least as regards physical disability. In studying this matter much help will come from adopting the view of Geddes and Thomson in their work on "The Evolution of Sex," that the female is characteristically anabolic, while the male is as distinctly katabolic. In securing hygienic school-life for girls attention should be given to nutrition. Periodical weighing and measurement should be adopted in every well-conducted school. Much care should be given to the regulation of physical exercise. Suitable clothing both for ordinary wear and for exercise should always be provided. Abundance of interesting occupation and a healthy mental environment with plenty of rest between the periods of activity is of the utmost importance.

Social and other demands should not be allowed to disturb the proper periods for sleep. In the case of school boards it is certainly well that boards of management are now realising the importance of appointing medical men to act as examiners and advisers in all matters affecting the health of the school children. There is need for much research in the rapidly evolving science of school hygiene.

Medical Aid in India.

With a growing realisation of the responsibilities of Empire, and a righteous pride in the might and majesty of our Indian possessions, it is well that those at home should be acquainted with the means available for meeting the necessities of the diseased. Although busy in the maintenance and extension of our British hospitals and their medical schools, it is necessary that the requirements of our own dominions beyond the seas should not be forgotten, and in no ways neglected. Sir Richard Temple, in his new work on the "Progress of India, Japan and China in the Century," shows that there are something like 1,300 hospitals and charitable dispensaries scattered through the 250 administrative districts into which British India is divided. They receive about half-a-million of indoor patients in a year, and afford outdoor relief to many millions. Despite any prejudices which they might be supposed to have, the natives appear to confide in, and to highly prize, European advice and medicine. Of European surgery they have the highest opinion. It is particularly interesting to notice that the opening of dispensaries on the remote Frontiers among wild tribes has always been found to have a good effect politically. Sir Richard Temple further shows that these institutions, while illustrating Western science and charity, also afford a wide scope for the work of native medical practitioners among their own countrymen. Vaccination has proved so beneficial that practically no objections have been raised among the native community. But, in spite of much progress, the public health of India can hardly be considered good according to European standards. The death-rate varies much in different districts and in different years, ranging from 22 to 25 per 1,000, and not infrequently rising to above 30 per 1,000. Evidently India still presents a wide field for the sanitarian and for the teacher and practitioner of medicine.

The International Congress for the Welfare and Protection of Children.

The very successful Congress held during the past week is the third of what we trust will be a long series. The former gatherings were in Florence and Buda-Pesth. The present Congress met under the patronage of the King and the presidency of Earl Beauchamp. The medical section was directed by Sir James Crichton-Browne, who delivered a valuable address on Physical Efficiency in Children, of which we give a full abstract in another column. In this the author maintained that, as compared with America, we were lagging in the scientific pursuit of measures to secure the highest welfare for the child life of the nation. Numerous subjects of medical and hygienic interest were considered. Dr. John F. J. Sykes urged the necessity of securing hygiene and sanitation in the home and at school; Dr. Francis Warner dwelt on the principles directing the physical training of children; Drs. Shuttleworth, M. W. Barr, Fletcher Beach, and J. Milson Rhodes discussed the management of imbecile, feeble-minded and epileptic children; Dr. Kelynack opened the discussion on infant life protection. A large number of papers were discussed in the legislative and educational and philanthropic sections. Earl Beauchamp held a reception at the New Gallery; Dr. and Mrs. Shuttleworth gave a garden party at Richmond; and visits were also made to the Royal Normal College for the Blind, Redhill Reformatory, Earlswood Asylum, Hanwell School and Holborn Union Schools. A dinner to the delegates was also given at the Savoy by Commendatore A. Scander Levi. The Congress will have done much to further the interests of child-life in this and other countries. We understand the next Congress will probably meet in Berlin.

A New Classification of Hospital Patients.

In the proposed new civic hospital for contagious diseases in Montreal the patients are to be classified in a novel manner, the grouping being arranged on the basis of religious affinities, irrespective, possibly, of their morbid characteristics. It is sad to think that sectarian differences follow patients even into small-pox hospitals, and we can only hope that theological considerations will not be accorded undue influence in respect of treatment. The next step will be to classify drugs as Catholic and Protestant respectively, so that no confusion shall be possible.

Chinese Medicine.

As everyone knows, the practice of medicine in China at the present day presents a simple farrago of nonsense and superstition. Such things as wasps' nests, powdered human skull, earth worms, and other abominations, animal, vegetable and mineral are prominent among their drugs. After all, we need not go back a couple of hundred years in Western pharmacy to find physic compounded freely from materials no less grotesque and revolting. Indeed, when we take the scientific remedial treatment of to-day we see it is derived from sources that are not altogether unlike the ancient haphazard conditions whereby our ridicule is provoked. The difference is mainly one of superior chemistry, which enables us by the use of active principles and extracts of various animal and vegetable substances to substitute the precision of the rifle for the diffuse inaccuracy of the blunderbuss. As to surgery in China, it is chiefly conspicuous by its absence, and appears to consist chiefly in vigorous mechanical counter-irritation. It is to be hoped, therefore, on the score of humanity, that modern scientific methods may replace the existing barbarous medical practice among the Chinese. Japan has assimilated the whole range of Western scientific medicine and surgery with an adaptability little short of marvellous. To such a degree has this process been carried that some of the great modern discoveries in bacteriology have hailed from that country. The Japanese are credited with the desire to introduce scientific medical practice into China. Should Western methods of education be adopted in China, which shows some inclination to take that step, it is likely that a new race of medical practitioners will be an early outcome of the movement.

Mr. Herbert Spencer on Euthanasia.

Mr. Herbert Spencer's recent and, as he promises us, his last work, is unfortunately hardly likely to enhance his reputation. His suggestion respecting euthanasia is we fear one which, should he attempt to carry it into practice, would quickly make him liable to prosecution by the admirable society for the protection of animals from cruelty. It has occurred to the eminent philosopher that "by centrifugal force the cerebral circulation might easily be regulated." A person placed with his head in the centre of a table capable of being made to revolve on its axis, a moderate speed of rotation would cause abstraction of blood from the head and determination of it towards the feet; while, contrariwise, if the feet were placed in the centre and his head at the circumference, his head would become congested. It has occurred to Mr. Spencer that "the fatal result quickly entailed on a patient so placed, even when the velocity of rotation was moderate, was a fatal result, which might intentionally be produced where the death penalty had been pronounced." And we are told that "there would thus be provided for them a simple means of euthanasia." Mr. Spencer, we learn, entertained the thought of having the experiment tried at the Home for Lost Dogs, but either through the discouragement of his anti-vivisectionist friends or from other causes his idea was never carried out, and now it is published "in the hope that some one with adequate time and means will do that which I was compelled to leave undone." We sincerely hope that no one will be so foolish as to dabble in such disreputable "euthanasia."

Rational Clothing in Hot Weather.

The heat of our English "two days and a thunderstorm" gives rise invariably to the annually recurring discussion as to the need for rational clothing. With the rapidly occurring climatic variations it is sometimes difficult to quickly adopt a change in garments. The tendency is, however, becoming more marked to adapt dress to climatic requirements, and present day attire is perhaps more sensible than in any previous period. There is, of course, much to learn and much to do if sound hygienic principles are to prevail in the matter of clothing. While the private individual is more or less fettered by custom, fashion, and financial restrictions, the public officer, such as the policeman, the postman, and the soldier, is still to a large extent bound down by cast-iron fetters of law or entangled by red-tape regulations. The other day the question of postmen's clothing was raised in the House of Commons, and we think it would be well that the whole matter of official clothing should be carefully considered and fully investigated, and not merely be raised during the enervating season of highest summer temperatures. There can be but little doubt that health might be better preserved and disease rendered less serious if some of our public servants were provided with clothes more suited to the character of their work and permitting of speedy modification to meet the rapidly-occurring alterations of our summer days.

Sunday Baking.

Under the most favourable circumstances the baking of bread cannot be considered a healthy occupation. Indeed, the whole class of bakers would with little hesitation be relegated by an actuary or a medical examiner to the list of "bad lives." For many years past sanitary reformers and legislators have laboured to render the lot of the journeyman baker more tolerable and wholesome. Unfortunately the interests involved are complicated and extensive, so that progress has been made only in the slowest fashion. There is a good prospect, however, that in the year 1904 the underground bakehouse, greatest scandal of all, will be brought under the heel of repressive legislation; but much will depend on the attitude of the local authorities throughout the kingdom. So long ago as 1822 the Legislature passed an Act prohibiting the baking and delivery of bread on Sundays. At the present day, eighty years later, that law is openly defied. The London Master Bakers' Society, it is true, in conjunction with the Amalgamated Union of Operative Bakers, have taken upon themselves the task of initiating proceedings, and have spent £1,000 for that purpose. There are many obstacles in the way of securing convictions. It is to be hoped that Parliament may be induced to turn their attention to this matter, so as to ensure the enforcement of a salutary law whereby a large section of the industrial community is granted one day of rest in each week.

Concerning Asafœtida.

Asafœtida is collected in Persia in the districts of Ispahan, Mahior and Abedeh, and Golak, a Russian author, states that domestic animals which have eaten the leaves of the umbelliferous plant which furnishes the resin are thereby impregnated to such an extent that their flesh and milk, and the butter made from the latter, acquire thereby such a nauseating taste and odour as to render them impossible articles of food, though the natives appear to have cultivated a taste for this too pronounced flavour. We commend this observation to the notice of missionaries and travellers in lands inhabited by people of cannibal propensities in the hope that they may find in asafœtida a means of rendering their flesh inedible. The only drawback to this prophylactic measure is that the disgusting qualities of their flesh would only become apparent at a stage of the proceedings when the explorers themselves have long since ceased to take any personal interest in the composition of the *menu*. Still, if anything can be done by other than moral suasion to dissuade savages from the consumption of "long pig," a further step will have been accomplished in the direction of civilisation.

Royal Orthopædic Hospital.

IN our issue of April 19th we remarked that the proposed sale of the site of this hospital seemed "an unbusiness-like proceeding most disadvantageous to the hospital," and recent occurrences have demonstrated the correctness of our view. For instance, a sale on the same side of Oxford Street of a freehold having only one frontage one-seventh the area of this hospital's site realised £10 a square foot. At this figure the value of the Hospital site, which has two frontages, is some £7,000, but if only £7 a square foot can be obtained, then the present value is £49,000, and as a matter of fact, experts who have proved correct hitherto, estimate it as being now worth £47,000. Yet this is the site that the management of the hospital propose to sell for £40,000. As the so-called reasons for sale stated at the annual meeting, such as large average cost of repairs, insanitation, unsuitable, and unhealthy site, &c., have all broken down on examination, it can no longer be claimed that there is the slightest urgency or necessity for sale or letting. It would certainly be wise to rebuild the Oxford Street part in order to earn an increased income of £600 a year, and to accommodate the matron, nursing staff, &c., and set free more beds in the Hanover Square part, which is now the in-patient department of the hospital. A solid offer from a highly responsible firm has been made which will enable the hospital to be rebuilt in whole or part free of cost, and as the governors know nothing of the important conditions which have arisen since the annual meeting, most certainly the whole facts should be put plainly to them before sale is permitted. Their property is being dealt with, and we cannot believe they, the trustees or the committee, could possibly consent to an unnecessary sale, and thus prevent the hospital earning the additional income which it so sadly needs. By rebuilding on present site the property will be immensely improved in value. It has risen £12,000 in three years, and must considerably increase in the future; why, therefore, should these great advantages be thrown away? We have no hesitation in repeating that in our judgment the proposed sale is in every way most disadvantageous to the hospital, and should be opposed by all friends of the hospital. The matter is at present under the consideration of the Charity Commissioners, who are holding a Court of Inquiry into the proposed sale. In any case, the fullest publicity is demanded in the interests of the wise management of the medical charities of the metropolis.

Medical Examination in Cases of Rape.

THE investigation of alleged cases of rape is among the most difficult and responsible with which the medico-legalist has to deal. Dr. Arthur Powell, the police-surgeon of Bombay, in a recent paper on this subject in the *Indian Medical Gazette* for June, offers many practical suggestions. He shows that an important point not mentioned in the text-books refers to the presence of smegma. If the glans be covered with a uniform layer of smegma the possibility of recent complete penetration is negatived. He also insists that too much weight is usually given to the presence of semen on the clothes or person of the accused. The police should have instructions never to allow one accused of a sexual offence to wash his person or retire to a water-closet on any pretext before the surgeon has made his examination. Dr. Powell also shows that unfortunately in India, as in Europe, the superstition prevails that intercourse with a virgin is a certain cure for venereal disease.

The Educational Treatment of Locomotor Ataxy.

ONE of the chief clinical features of ataxia being muscular inco-ordination, attempts have been made to remedy this defect of innervation by a method of re-educating the nerve centres concerned in locomotion. The results have been encouraging, but as success has not been uniform there remains the suspicion of possible errors in diagnosis. Some cases of multiple neuritis often closely simulate ataxia and in such cases graduated methodical exercises might be expected to prove of benefit, whereas in ataxia it is difficult to furnish any plausible explanation of the improvement. In any event, by assisting in the maintenance of the nutrition of the muscular, and perhaps of the nervous, system, such exercises, if proportioned to the strength of the patient, are calculated to delay the further progress of the disease.

American Medical Etiquette.

INTERESTING light is thrown on the view of the modern American medical man regarding certain matters of medical etiquette by a study of the recent issue of the *New York Medical Journal*, one of the leading Transatlantic professional papers, in which the illness of King Edward is considered. Portraits are given of several of the medical men in attendance, with various interesting personal details. Moreover, well-known members of the profession express their views freely concerning various phases of the malady which has so seriously threatened our King's life, and which has turned our Coronation rejoicing into the silence of tragedy. This publicity may be all very well for our American cousins, but we venture to think that the English public would be slow to approve any departure from that reserve and self-suppression which medical etiquette imposes on members of the profession in this country.

Sunstroke and Military Reviews.

MILITARY reviews, as now held during the summer months, are always cause for much discomfort to many of those who have to participate in them, and not infrequently many cases of sunstroke and serious cardiac syncope occur. Drs. Cornil and Chantemesse have recently advocated the holding of summer reviews in the early part of the morning, before eight o'clock. Certainly during the heat of midday the conduct of military reviews is often fraught with danger. Perhaps the War Office will some day find time and wisdom to consider this matter.

Lockjaw and Superstition.

IN a death from tetanus, investigated last week by the Norwich Coroner, a curious superstition came to light. The deceased, who was wearing a carpet slipper at the time, stepped upon a nail, which ran into her foot, and tetanus ensued. At the time of the accident deceased herself pulled the nail, which was a new one, out of her foot. No treatment was adopted, but she instructed her daughter to grease the nail, with a view of causing the wound to heal. Tetanus developed and the patient was removed to hospital, but at too late a stage to given any chance of recovery under the administration of modern scientific remedies. It seems almost incredible that such a survival of mediæval superstition could be found in these days of board schools. The incident affords a timely illustration of the need of the spreading of a comprehensive net in Mr. Balfour's new Education Acts.

A Shoreditch Herbalist.

A CERTAIN Mr. Perdue, of Galt Street, Limehouse, has come into prominence on no less than thirteen occasions in consequence of his having medically attended persons suffering from diseases which subsequently proved fatal. He describes himself as a registered herbalist, and the jury at an inquest last week ingenuously requested the Coroner to call the attention of the General Medical Council to this herbalist's conduct. As the Council is hardly likely to move in the matter, we beg to call the attention of the Medical Defence Union and the London and Counties Medical Protection Society to the case, in the hope that something may be done to prevent any further frauds of the kind on the sick poor.

The Americanisation of our Drinking Habits.

BROTHER JONATHAN and his influence seem to be touching us at all points. We are recognising his power at sea as well as on land, underground as well as "on the surface"; he furnishes us with much of our food, and now, as is evidenced by almost every place of refreshment in the Metropolis, he is revolutionising our "drinks." And there is much in the American invasion of summer beverages for which we may well be thankful. Of the simpler and cheaper kind there is little to disapprove. Many are pleasant and physiologically suitable. The American has proved that "temperance drinks" may be made wholesome and inviting, but, unfortunately, he has not forgotten to show how they may be "fortified" by the addition of gin, absinthe, and other dangerous ingredients.

PERSONAL.

SIR A. CONAN DOYLE, M.D., has been appointed Deputy-Lieutenant of the County of Surrey.

DR. E. FARQUHAR BUZZARD has been appointed Pathologist to the National Hospital for the Paralysed and Epileptic, Queen's Square.

SIR HENRY NORBURY has drawn attention to the lack of suitable accommodation for dealing with wounded on modern warships in time of war.

SIR W. B. RICHMOND has accepted the Presidency of the Betterment of London Association, which seeks to improve the condition of the Metropolis.

DR. E. D. BOND died at the London Fever Hospital, Islington, at the early age of twenty-eight, from scarlet fever contracted in the course of his duties.

MR. CHARLES STEWART, Mr. William McAdam Eccles, and Mr. Arthur Keith have been appointed Hunterian Professors to the Royal College of Surgeons of England.

MR. ALEXANDER G. R. FOULERTON, Director of the Cancer Research Laboratories at the Middlesex Hospital, has been appointed a member of the German Cancer Investigation Committee.

WE trust Lord Wandsworth's example will have many imitators. He has sent to King Edward's Hospital Fund for London a gift of £500 as a thank-offering for his Majesty's recovery.

PROFESSOR ERB will deliver the opening lecture of the Winter Session of the Post-Graduate College of the West London Hospital on October 8th, the subject being "Syphilis of the Spinal Cord."

MR. H. B. WHITEHOUSE, of Birmingham, a student at St. Thomas's, not only gained the Entrance Science Scholarship, valued at £150, with a Certificate of Honour, but was also successful in carrying off the William Tite Scholarship, worth £27.

PROFESSOR VIRCHOW for some time past has been staying at Schierke, in the Harz mountains, recovering from the effects of his severe accident. He has been lately subject to fainting fits, and fears are entertained that at his advanced age he may not recover.

DR. W. G. GRACE, the "Grand Old Man" of the cricketing world, celebrated his fifty-fourth birthday on Friday, July 18th. We heartily wish him "many happy returns of the day." Dr. Grace has doubtless found greater pleasure in wielding the bat than handling the knife.

SURGEON-MAJOR FORD, who recently died at a ripe old age at Torquay, is said to have shot more big game than any man living. His shooting book contains the record of the deaths of 122 tigers, thirty-five panthers, seven Indian lions, besides many bison, bulls, and deer.

WE understand that Lord Salisbury has expressed the intention of spending most of his time in comparative retirement at Hatfield. It is well to remember that our veteran late premier is not only a politician but an eminent scientist, and especially an enthusiastic chemist; and we trust that from the quiet laboratory at Hatfield world-moulding power may still flow.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

BELFAST.

MEDICAL ETIQUETTE AND THE PUBLIC.—The burning fatality at Whitehead, by which a young woman lost her life, and the subsequent inquest, have supplied a text to many of the daily papers for articles on medical etiquette, which generally suggest that the ethical rules of our profession are at variance with the common laws of humanity. On June 26th Miss Allen joined an excursion from Belfast to Whitehead, and on the railway platform at the latter place her light dress caught fire from a burning wax vesta carelessly thrown away by a smoker. Dr. Calwell, of Duncairn Gardens, Belfast (not Dr. Wm. Calwell, one of the physicians to the Royal Victoria Hospital, as has been erroneously reported), was on the platform, and came to the aid of the unfortunate girl, taking her on a car to an hotel near to the station. On the way they met Dr. Martin, the local practitioner, who alleges that he offered to help and received a snubbing reply, being told that the girl was hysterical and not much hurt, so that when a messenger was sent to him subsequently asking for a supply of carron oil he refused. Dr. Calwell denies that he refused Dr. Martin's offers of help, or made light of the girl's injuries, and when, after several weeks, she died, the coroner's jury elected to prefer his version of the facts, and condemned Dr. Martin's action. It is a painful and humiliating episode for the profession, the members of which in Belfast seem to divide the blame equally between the two young men, thinking the one too high-handed and the other too ready to take offence.

NORTH OF IRELAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.—The annual meeting of this branch was held in the Museum, Belfast, on the 17th inst., the President, Dr. J. Singleton Darling (Lurgan), in the chair. Cases were shown and discussed by Dr. Cecil Shaw, Professor Lorrian Smith, Professor Byers, Mr. Kirke, Dr. Mitchell, Dr. Norman Barnett, Dr. Dempsey, and Dr. Calwell.

Sir William Whitla announced that in future the branch would be invited to hold its meetings in the new medical institute, which will, he hopes, be ready in October.

The President announced the result of the election of office-bearers for the coming year as follows:—President: Prof. Sinclair, F.R.C.S. Vice-Presidents: (Town) Dr. A. B. Mitchell; (Country) D. Donnan, Holywood. Council: (Town) Sir William Whitla, Dr. Dempsey, Dr. Cecil Shaw, Professor Lindsay, Dr. J. Campbell, Dr, McKisack, Professor Byers, Mr. T. S. Kirk. (Country) Dr. J. C. Martin, Portrush; Dr. St. George, Lisburn; Dr. Stuart, Ballymena; Dr. Gaussen, Dunmarry; Dr. Darling, Lurgan; Dr. Hall, Monaghan; Dr. Agnew, Lurgan; Dr. Gray, Armagh. Representatives of Branch on Council: Professor Byers, Dr. Calwell. Representatives on Parliamentary Bills Committee: Dr. Dempsey. Hon. Treasurer: Dr. George Gray, Newcastle, County Down. Hon. Secretary: Dr. Calwell, 1. College Square North, Belfast.

Literature.

LOCAL TREATMENT IN DISEASES OF THE AIR PASSAGES. (*a*)

THIS little book is a reprint of two lectures delivered at the Medical Graduates College and Polyclinic, and published in the first place in the *British Medical Journal* in November last. On their first appearance these lectures caused considerable emotion in rhinological circles, and led to a controversy which was carried on with rather more bitterness than we like to see displayed in medical polemics. There can be no denying, however, the fact that the author's timely protest against the "lust of operation" was of great service in drawing attention to a state of things which was rapidly bringing discredit on the specialty.

The first lecture treats of affections of the upper air passages of a purely local character. The question of adenoid vegetations naturally takes up a considerable space, and the author, in describing his method of removing them, lets drop some useful hints. A critical examination is made of Mr. Arbuthnot Lane's treatment by means of "breathing exercises." Both here and in the subsequent dispute with Mr. Lane the author gets the best of the argument. But whether it was quite fair to class "breathing exercises" with Christian Science and rheumatism rings is another question. Breathing exercises, if properly carried out after the removal of the growths, are undoubtedly of use in preventing recurrence. In the second lecture local manifestations of general systemic diseases are dealt with. Particular stress is laid on the importance of thoroughness in the treatment of laryngeal tuberculosis, the half-hearted way in which it is done often doing more harm than good. The author gives at some length his views on the possibility of curing asthma and other reflex disorders by nasal operation. He says that he has never seen a case of a so-called reflex neurosis disappear after removal of adenoids, and, except in a small percentage of cases, after any intranasal operation. This experience is not in accordance with that of most rhinologists.

The author reprints in the form of an appendix two letters he sent to the *British Medical Journal*, defending the position he had taken up.

On the whole this is a very instructive and suggestive little book, but it would have been better if it had been freer from personalities.

TRANSACTIONS OF THE ROYAL ACADEMY OF MEDICINE. (*b*)

THIS, the nineteenth volume of the "Transactions of the Royal Academy of Medicine in Ireland," contains a number of interesting papers in each section. In Medicine, Dr. W. R. Dawson contributes a valuable record of a year's work at Farnham Asylum. In Surgery, Mr. H. Newman's paper, "Double Primary Chronic Glaucoma," is a contribution of perennial value. The Rotunda Hospital report gives value to the Obstetrical section, and in State Medicine, Dr. M'Weeney made a valuable addition to our knowledge by his paper on Tuberculosis.

Mortality of Foreign Cities.

THE death-rates in the principal foreign cities of the world from which official returns are received by the Registrar-General, were for the last week per 1,000 living: In Calcutta 29, Bombay 36, Madras 35, Paris 18, Brussels 13, Antwerp 16, Amsterdam 17, Copenhagen 15, Stockholm 12, Christiania 14, St. Petersburg 24, Moscow 31, Hamburg 15, Munich 22, Vienna 19, Prague 23, Buda-Pesth 16, Trieste 22, Rome 20, Venice 13, Cairo 40, Alexandria 33, New York 18, Philadelphia 17, Boston 16.

(*a*) 'Some Thoughts on the Principles of Local Treatment in Diseases of the Upper Air Passages." By Sir Felix Semon, M.D., F.R.C.P. Macmillan and Co. 1902. Price 2s. 6d.

(*b*) "Transactions of the Royal Academy of Medicine in Ireland." Vol. xix. Edited by John B. Story, M.B., F.R.C.S. Dublin: Fannin and Co., Limited. London: Baillière, Tindall and Cox. 1901.

Obituary.

DR. WILLIAM WARWICK, OF BELFAST.

By the death of Dr. William Warwick, Belfast has lost one of its oldest and most respected medical practitioners. He was one of the earliest students of the Belfast Queen's College, but, following the practice of the time, he went for the M.R.C.S.Eng., and to Aberdeen for his M.D. He was one of the old school of family physicians—the friend quite as much as the physician. Of his latter-day clients he had known most of them from their birth, and had become endeared to them by unnumbered acts of kindness. Of a particularly modest and retiring disposition, he declined many honours that his fellow citizens would have conferred on him, and chose the quiet routine of a family practice, in the duties of which he won love and respect, and died honoured.

DR. HEMPHILL, OF CLONMEL.

It is with regret that we announce the death of Dr. W. D. Hemphill, of Clonmel, which event took place on Sunday, July 6th, at his residence, Oakville. During the past two years failing strength prevented his carrying on his practice with his usual vigour, and within the past five months the natural effects of advancing years became more marked. He was born in 1816, and educated at the Endowed School, Clonmel. He took the L.R.C.S.I. as far back as 1838, and the Fellowship of the College in the year of the institution of the qualification. In the same year he became an M.D. of St. Andrew's University. He had a large and remunerative practice in Clonmel and its neighbourhood, which left little time for literary work, yet he managed to find time for writing an historical sketch of the abbeys, castles, and country around Clonmel. In 1875 he published a valuable paper on blood stains in their medicolegal aspect. Until quite recently he was consulting physician to the gaol, and he was one of the last of the consulting physicians to the district lunatic asylum.

Medical News.

Health of the City of London.

The City of London must be considered almost unique as regards its conditions of life and death, opportunities for work and pleasure, states of labour and repose. Dr. Collingridge, in his recently-issued report, shows that the birth-rate is only 13·7 per thousand, while in England and Wales it was 28·9. The city mortality works out at 16·6 per thousand as compared with 18·6 for the thirty-three great towns. The infantile death-rate of children under one year of age was 160 per 1,000 births. Deaths from accidents or violence amounted to 7·45 per cent. Certainly London must be considered as a study to itself.

Royal College of Physicians, Ireland.

The King's Professorship of Materia Medica and Pharmacy will become vacant in October, when the President and Fellows of the College will proceed to elect a Professor to the chair. Candidates for the appointment must send in their names, the places of their education, the University at which they have taken their Medical degrees (if any), and the places at which they have practised, on or before October 10th, 1902, to James Craig, B.A., M.D., Univ. Dub., Fellow and Registrar of the Royal College of Physicians of Ireland; and to the Rev. J. P. Mahaffy, D.D., Registrar of Trinity College, Dublin.

A Memento of Sir William Jenner.

Lady Jenner has presented the Royal College of Physicians of London with an interesting memento of the late Sir William Jenner in the shape of a handsome silver vase given to that distinguished physician by the Duke of Albany.

The Cost of the Small-pox Epidemic..

The imposition of a rate estimated at close upon 3½d. in the pound will open the eyes of the public to the fact that an epidemic of small-pox is a very expensive luxury, and incidentally to the discovery that revaccination, whatever its cost, affords an economical means of avoiding this enormous expenditure. By easy steps they will come to understand that persons who from ignorance, indifference or prejudice fail to avail themselves of this protection are doing so at the cost of the community. Moreover, the gross expenditure of the Metropolitan Asylums Board in respect of small-pox during the last six months, over half a million, by no means represents anything like the total cost of the epidemic, for we must take into account the misery inflicted on innocent victims indirectly affected thereby, the loss of labour value, and the cost of disinfection, inspection, &c. In round figures, we may take it that the present epidemic has already cost upwards of two millions sterling, and will entail the expenditure of several millions more before it subsides. This is a valuable object lesson, which should open the eyes of the public to the foolishness of permitting such an onerous and unnecessary tax to be thrown upon the public.

Small-pox and Fever in London.

At midnight on Friday there were 469 patients under treatment in the small-pox institutions of the Metropolitan Asylums Board. Two additional cases were admitted on Saturday—one each from Wandsworth and Fulham, and on Sunday, down to 7 p.m., one further case had been notified which came from Paddington. The fever and diphtheria patients under treatment in the Board's fever hospitals at midnight on Friday numbered 3,557.

Dinner to Colonel Hodson, R.A.M.C.

At the Dolphin Hotel, Dublin, on Thursday, the officers of the Royal Army Medical Corps in Dublin and the Civil Surgeons attached gave a complimentary dinner to Lieutenant-Colonel R. D. Hodson, R.A.M.C., acting Principal Medical Officer of the 3rd Army Corps, who is about to leave for Ceylon. Lieutenant-Colonel F. G. Adye Curran, R.A.M.C., occupied the chair, and Lieutenant-Colonel W. P. Inman, R.A.M.C., the vice chair, and all the R.A.M.C. officers and civil surgeons stationed in Dublin were present.

Starving a Recalcitrant Jury.

A coroner's jury at Sutton Coldfield has, we learn, been locked up without food or water for fourteen hours because they were unable to agree on their verdict. A coroner is armed with immense power, and doubtless rightly so, but when he uses it for the perpetuation of methods of barbarism it is necessary that the sufferers should be protected. The Coroners' Society, and many members of the medical profession, have long been agitating for reform in our Coroners' Courts, and such instances as we have referred to may well further their efforts.

Royal Dental Hospital of London.

The annual *conversazione* and prize distribution took place on Friday last at Prince's Hall, when a large number of the students and friends assembled. The Dean (Mr. Morton Smale), who presided, said the King, who became Patron of the Hospital last year, had now commanded it to be called Royal. This being the first public gathering since that event, it seemed to him to be appropriate to send to the King a message of congratulation on his convalescence and of thanks for the honour conferred upon the charity. The message he proposed to send was as follows:—"The staff and students of the Royal Dental Hospital of London, assembled at their annual prize distribution, desire to express their loyalty to the King and to the Throne, their sincere and heartfelt thankfulness for his Majesty's convalescence, and their gratitude for the honour recently conferred upon the institution by its having been created a Royal Hospital. Both staff and students will always endeavour to uphold the honour thus conferred upon it." Sir A. Rücker, having distributed the prizes to the successful students, delivered a brief address, in which he expressed the hope that the time was coming when, more than in the present, the different schools in London would feel proud to be part of the great University of London. If success was attained, as he believed it would be, the London University would be one of the most marvellous institutions in the world. The University was introducing a new matriculation examination, in which it was not intended to overweigh the student, but to leave spare time for individual improvement. In conclusion, Sir Arthur said the University was also considering the possibility of founding a large medical institute for preliminary medical studies.

German Spa Excursion.

INFORMATION concerning the proposed medical excursion to German watering-places and health resorts may be obtained from Dr. W. H. Gilbert, Baden-Baden, and Dr. P. Meissner, 81 Kurfürstenstrasse, Berlin. The amount of the subscription is 150 marks (£7 10s.).

Munificent Bequest by a Medical Man.

A SUM of £20,000 was left by Mr. G. G. Scale, surgeon to the Portsmouth Corporation, to provide annuities of £30 each for eighteen deserving blind persons of either sex, born in Hampshire, or who had lived in that county for five years prior to becoming candidates.

Vital Statistics.

THE deaths registered last week in seventy-six great towns of England and Wales corresponded to an annual rate of 14·5 per 1,000 of their aggregate population, which is estimated at 14,862,456 persons in the middle of this year. The highest annual death-rates per 1,000 living, as measured by last week's mortality, were:—from measles: 1·2 in Bristol, 1·4 in Birkenhead, 1·7 in Bootle, 1·8 in Rhondda, 1·9 in Rochdale, 2·4 in Plymouth and in Warrington, and 2·7 in Barrow-in-Furness; from scarlet fever: 1·6 in Burnley, 2·0 in Stockton-on-Tees, and 3·2 in West Bromwich; from diphtheria: 1·2 in Walsall, 1·5 in Coventry, and 1·6 in West Hartlepool; from whooping-cough: 1·3 in West Ham and in Aston Manor, 1·4 in Birkenhead, 1·5 in South Shields, 1·7 in Bootle, 1·8 in Barrow-in-Furness, and 2·3 in Norwich; from "fever": 1·5 in Ipswich, and 1·8 in Barrow-in-Furness; and from diarrhœa: 1·4 in Preston, and 2·6 in Bootle. The 18 deaths from small-pox included 13 belonging to London, 2 to Swansea, and 1 each to Croydon, Tottenham, and Walthamstow. In London 2,530 births and 1,280 deaths were registered. Allowing for increase of population, the births were 78, and the deaths 254, below the average numbers in the corresponding weeks of the last ten years.

Society of Medical Phonographers.

THIS Society will hold its next annual Shorthand Examination early in May, 1903. Two prizes will be offered, each of the value of £5, one for first-year students and one for students of more than one year's standing. The competition will be open to any registered medical student in the United Kingdom who has not taken a first prize at one of the Society's previous examinations. It will be held simultaneously in London, Edinburgh, Dublin, and at any provincial medical centre in the United Kingdom at which not fewer than three candidates shall offer themselves. Intending candidates should send in their names as early as possible to Dr. P. G. Griffith, Bonhams, Farnborough, Hants, who will furnish them in return with a detailed prospectus of the examination. The latest date for receiving entries will be April 15th, 1903.

St. Bartholomew's Hospital and College.

THE following scholarships, medals, and prizes were awarded last week for the Winter and Summer Sessions, 1901-1902:—Lawrence Scholarship and Gold Medal.—R. C. Elmslie. Brackenbury Medical Scholarship.—A. E. Thomas, Prox. Acc., W. W. Jendwine, E. G. Pringle. Brackenbury Surgical Scholarship.—F. P. Connor. Matthews Duncan Medal and Prize.—A. R. Neligan. Senior Scholarship in Anatomy, Physiology, and Chemistry.—J. G. Atkinson. Senior Entrance Scholarships in Science.—J. M. Hamill, R. F. Moore. Junior Entrance Scholarships in Science.—H. E. Quick. Preliminary Scientific Exhibition.—D. W. Hume and A. M. Jukes. Jeaffreson Exhibition.—A. Kernahan and E. de Verteuil. Shuter Scholarship.—J. K. Willis. Kirkes Scholarship and Gold Medal.—E. G. Pringle. Hichens Prize.—K. S. Wise. Harvey Prize.—F. B. Ambler. Sir George Burrows' Prize.—E. G. Pringle. Skynner Prize.—E. G. Pringle. Practical Anatomy (Junior).—Treasurer's Prize.—P. L. Giuseppi. Practical Anatomy (Senior).—Foster Prize.—F. B. Ambler; C. B. D. Butcher (Lecturer's Prize). Junior Scholarships in Anatomy and Biology (1902).—1, P. L. Giuseppi; 2, H. E. Quick. Junior Scholarships in Chemistry and Histology (1901).—1, F. B. Ambler; 2 R. H. Bott.

Charing Cross Hospital Medical School.

THE following scholarships, medals, and prizes for the Summer Session, 1901, and Winter Session, 1901-1902, have been awarded:—Epsom Scholar.—Mr. E. H. Hugo. Huxley Scholar.—Mr. W. K. Beaman. Llewellyn Prize, Certificate and £25.—Mr. S. A. Boyd. Pereira Prize, Certificate and £5.—Mr. H. M. Joseph, Mr. C. L. Lakin (equal). Golding Prize, Certificate and £10.—Mr. L. E. M. Smith. Governors' Clinical Gold Medal.—Mr. A. G. Payne. Huxley Medal with prize of £10.—Mr. A. A. Smith. Anatomy (Senior).—Prize, Mr. A. Dinnis. Anatomy (Junior).—Prize (Steadman), Mr. L. E. M. Smith; Prize (School), Mr. F. G. Edholm. Biology.—Prize, Mr. W. K. Beaman. Chemistry.—Prize, Mr. W. K. Beaman. Physiology (Senior).—Prize, Mr. A. A. Smith. Physiology (Junior).—Prize, Mr. L. E. M. Smith.

Pass Lists.

Conjoint Examinations in Ireland by the Royal College of Physicians and Royal College of Surgeons.

THE following candidates have passed the First Professional Examination:—

Honours (Order of Merit).—P. Foran, M. O'Connor, C. W. Greene, W. P. Kelly, H. J. Perry, equal; H. M. Harrison, G. Petch, equal; E. H. F. Gilligan, J. B. Kelly, equal; C. M. Burton, J. R. Tobin, equal

Passed all subjects (alphabetically).—T. A. Burke, M. Cohen, Miss K. Dillon, J. Gaffney, W. Glennon, M. P. Healy, A. Hogan, J. Humphreys, M. J. Kelly, J. J. P. Kinsella, T. H. Massey, W. St. L. Moorhead, C. F. Murphy, D. M'Cormack, R. O'Kelly, O'C. J. O'Reilly, P. J. O'Reilly, J. Prindiville, R. J. Smallman, C. H. Waddell, M. Walters, R. Welply.

Completed Examinations: J. Burke, S. Clarke, J. J. Corr, Miss M. K. H. Griffin, F. N. Hillis, C. A. Lerper, A. L. Mansfield, J. O'L. Murray, S. M'Causland, F. J. M'Manus, J. V. O'Hagan, J. V. Sage, R. J. Swanton, G. W. Wright.

Society of Apothecaries of London.

AFTER the usual examinations the L.S.A. diploma has been granted to the following candidates, entitling them to practise medicine, surgery, and midwifery:—E. C. Curtis, H. G. Daft, S. F. Hickman, G. W. C. Hollist, E. A. Houchin, T. G. Miles, O. Millauro, G. Roper, T. Scatchard, J. E. Skey, H. H. Sloane, and H. C. S. Woodward.

Pharmaceutical Society of Ireland.

PRELIMINARY EXAMINATION.

The following candidates have passed:—

H. D. Starkey, D. Walshe, W. H. Ashmore, J. O. Lane, T. E. Yarr, C. E. Taylor (W. Kirkwood, R. Mulligan, M. C. Neill), D. Donnelly (J. Bell, W. W. Bennett), J. J. O'Toole, J. M. McConnell, S. P. Moloney, D. J. Nugent, Emily Warren, J. W. McKay, P. Cagney, passed. Fifteen candidates were rejected.

PHARMACEUTICAL LICENCE EXAMINATION.

W. A. Berry, J. B. Doran, R. Telford, (A. J. Thompson, J. J. Conway), T. Barry, J. Taylor, J. A. Walsh, Rose T. O'Connor, passed. Fifteen candidates were rejected.

REGISTERED DRUGGIST EXAMINATION.

H. Johnston, T. J. May, G. Richardson, passed. One candidate was rejected.

PHARMACEUTICAL ASSISTANT EXAMINATION.

J. H. Davis, A. O. Wells, passed. One candidate was rejected.

Notices to Correspondents, Short Letters, &c.

☞ **Correspondents** requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

Original Articles or Letters intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

P. B.—We are unable to comply with your request in the absence of the gentleman who furnished the report. We shall be pleased to place you in communication with him on his return.

Mr. Raber.—We do not admit contributions from other than medical men, and we are not disposed, after perusal of your manuscript, to make an exception in your favour.

Mr. Beck—We hope to complete the analysis shortly, and this will place us in a position to reply to your inquiry.

Traveller.—We know of no portable filter which would quite answer your purpose. The safer course when abroad is to avoid the "town water" altogether, all beverages being diluted with one or other of the mineral waters, which can be had at every hotel and restaurant.

THE SURGERY OF HOMŒOPATHY.

At the recent British Homœopathic Congress the President dwelt on the important developments of surgery, and practically admitted that in the realm of practical surgery "homœopathic methods" could hardly be followed.

Adenoids.—Most surgeons prefer operating under nitrous oxide, or nitrous oxide and ether, with the patient in the sitting-up position. On the other hand, a few specialists invariably use chloroform. To those skilled in operating under that particular anæsthetic the proceeding is not without its advantages.

F. R. (Surbiton).—The symptom you describe is most probably due to gall-stones. It is only in extreme cases that the advisability of operation need be seriously discussed. The great majority of cases get relief under simple medical treatment. Moreover, the symptoms of gall-stone sometimes recur even after removal of the gall-bladder.

Quærens.—1. You had better irrigate with a solution of boracic acid, which in that particular case is the most suitable of all antiseptics. Conjunctivitis due to "motoring" will, as a rule, quickly mend itself if the patient keeps quiet. 2. Rest is essential, and without its rigid enforcement treatment by drugs will be useless. 3. Strawberries do no harm in gout, and are popularly credited with a beneficial action in that condition.

Appointments.

Chaldecott, John Henry, L.R.C.P.Lond., F.F.P.S Glasg., Honorary Anæsthetist to the Italian Hospital, Queen's Square, W.C.

Clayton, T. M., M.B., B.S.Durh., Medical Officer of Health to the Gateshead Town Council.

Coates, W. H., M.B.Durh., Public Analyst to the Withernsea Urban Council.

Grindrod, J. A., M.R.C.S.Eng., Medical Officer of Health to the Horden Urban District Council.

Murray, J. G., L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., Certifying Surgeon under the Factory Act for the Scarborough District.

Pridmore, John Walter, M.R.C.S., L.R.C.P.Lond., District Medical Officer and Public Vaccinator of the Ryde District of the Isle of Wight Union.

Slader, George Burgess, L.R.C.S. and L,M. Irel., L.S.A.Lond., Medical Officer of Health to the Gainsborough Rural District Council and Medical Superintendent of the Rural District Council's Isolation Hospital, Gainsborough.

Toye, C. J., M.D.Lond., Medical Officer of Health for the Northam (Devon) District Council.

Vacancies.

City of London Hospital for Diseases of the Chest, Victoria Park, E.—Resident Medical Officer. Salary £100 per annum, with board, &c. Applications to the Secretary.

County Asylum, Mickleover, Derby. Junior Assistant Medical Officer (male). Salary £120, with furnished apartments, board, washing, and attendance. Applications to the Medical Superintendent.

Halifax Union Poor-law Hospital.—Resident Medical Officer. Salary £130 per annum, with apartments, rations, and washing. Applications to Arthur T. Longbotham, Solicitor and Clerk to the Guardians, 4, Carlton Street, Halifax.

Haydock Lodge Asylum, Lancashire.—Assistant Medical Officer. Salary to commence at £175 a year, with furnished quarters, board, washing, &c. Applications to Dr. Street, Haydock Lodge, Newton-le-Willows, Lancs.

Holloway Sanatorium Hospital for the Insane, Virginia Water, Surrey.—Junior Assistant Medical Officer. Salary £150 per annum, with board, lodging, and attendance. Applications to Dr. W. D. Moore, Medical Superintendent.

North Cambs. Hospital, Wisbech.—Resident Medical Officer. Salary £150 per annum, with furnished house. Applications to F. J. Gardiner, Hon. Sec.

Nottingham General Dispensary.—Senior Resident Surgeon. Salary £200 per annum. Also one Assistant Resident Surgeon. Salary £160 per annum. Furnished apartments, attendance, light, and fuel are found. Applications to M. I. Preston, Journal Chambers, Nottingham.

Rotherham Hospital and Dispensary.—Senior House Surgeon. Salary £110 per annum Applications to the Secretary, E. S. Baylis, 19, Moorgate Street, Rotherham.:

Royal Lancaster Infirmary.—House Surgeon. Salary £100 per annum, with residence, board, attendance and washing. Applications to the Secretary.

Births.

Boobbyer.—On July 17th, at 55, Burn's Street, Nottingham, the wife of Philip Boobbyer, M.B., of a daughter.

Cameron.—On July 15th, at West Park House, Dewsbury, the wife of G. Clark Camaron, M.D., of a daughter.

Fuller.—On July 19th, at 7, Oxford Row, Bath, the wife of A. Leonard Fuller, M.R C S Eng., L.R.C.P.Lond., of a son.

Gubbins.—On July 16th, at 15, Kildare Terrace, Bayswater, W., the wife of Colonel W. L. Gubbins, M.B., Royal Army Medical Corps, of a son.

Thompson.—On July 13th, the wife of F. B. Thompson, M.R.C.S., L.R.C.P.Lond., of a son.

Marriages.

Hawthorn—Metcalfe.—On Wednesday, July 16th, at St. Matthew's Church, Leyburn, the Rev. John Hawthorn, M.A.Camb., of Leyburn, to Mary (May), second daughter of Richard Metcalfe, M.D., of Eastfield Lodge, Leyburn.

Mayo—Smith.—On July 17th, at St. Thomas's Church, Portman Square, London, Thomas Alfred Mayo, M.B., of Cowes, I. of W., third son of Alfred Charles Mayo, J.P., of Great Yarmouth, to Mildred, youngest daughter of Sir Thomas Smith, Bart., K.C.V.O., F.R.C S., Serg.-Surgeon to H.M. the King.

Deaths.

Auchinleck.—On July 12th, at the Hotel Métropole, London, Surgeon-General Grahame Auchinleck, M.D., R.A.M.S., aged 76 years.

Watt.—On July 3rd, 1902, at his residence, Oaklands, Niagara-on-the-Lake, Ontario, Canada, West, in his 80th year, E. Halliday Watt, M.R.C.S.Eng., L S.A., formerly of Deal, Kent.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—St. George's, 2 p.m.—St. Mary's, 2.30 p.m.—Middlesex, 1.30 p.m.—Westminster, 2 p.m.—Chelsea, 2 p.m.—Samaritan (Gynæcological, by Physicians), 2 p.m.—Soho Square, 2 p.m.—Royal Orthopædic, 2 p.m.—City Orthopædic, 4 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a.m.—Royal Free, 2 p.m.

TUESDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex 1.30 p.m.—Westminster, 2 p.m.—West London, 2.30 p.m.—University College, 2 p.m.—St. George's 1 p.m.—St. Mary's, 1 p.m.—St. Mark's, 2.30 p.m.—Cancer, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Royal Ear, 3 p.m.—Samaritan 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—Soho Square, 2 p.m.

WEDNESDAYS.—St. Bartholomew's, 1.30 p.m.—University College, 2 p.m.—Royal Free, 2 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. Thomas's, 2 p.m.—London, 2 p.m.—King's College, 2 p.m.—St. George's, (Ophthalmic) 1 p.m.—St. Mary's 2 p.m.—National Orthopædic, 10 a.m.—St. Peter's, 2 p.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Gt. Ormond St., 9.30 a.m.—Gt. Northern Central, 2.30 p.m.—Westminster, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Cancer, 2 p.m.—Throat (Golden Square) 9.30 p.m.

THURSDAYS.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—University College, 2 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—London, 2 p.m.—King's College, 2 p.m.—Middlesex, 1.30 p.m.—St. Mary's, 2.30 p.m. Soho Square, 2 p.m.—North-West London, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central (Gynæcological), 2.30 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—St. Mark's, 2 p.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square) 9.30 a.m.

FRIDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—King's College, 2 p.m.—St. Mary's, 2 p.m.—Ophthalmic, 10 a.m.—Cancer, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—City Orthopædic, 2.30 p.m.—Soho Square, 2 p.m.

SATURDAYS.—Royal Free, 9 a.m.—London, 2 p.m.—Middlesex, 1.30 p.m.—St. Thomas's, 2 p.m.—University College, 9.15 a.m.—Charing Cross, 2 p.m.—St. George's, 1 p.m.—St. Mary's 10 p.m.—Throat (Golden Square), 9.30 a.m.

At the Royal Eye Hospital (2 p.m.), the Royal London Ophthalmic (10 a.m.), the Royal Westminster Ophthalmic (1.30 p.m.) and the Central London Ophthalmic Hospitals operations are performed daily.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, JULY 30, 1902. No. 5.

Original Communications.

A CASE OF
INTERNAL HYDROCEPHALUS
IN THE
ADULT, SIMULATING CEREBRAL TUMOUR.

By **WM. B. WARRINGTON, M.D. LOND., M.R.C.P.,**
Physician to the David Lewis Northern Hospital, Liverpool; Pathologist to the Stanley Hospital.

VARIOUS morbid conditions give rise to symptoms which resemble those of cerebral tumour; sometimes these depend on a constitutional cause, sometimes they are due to nervous disorders of an altogether different category. When the diagnosis tumour cerebri is made, treatment in spite of increased physiological knowledge and improved surgical technique is very unsatisfactory, though operative interference is often indicated, even if there is no prospect of removing the growth.

In the case to be recorded a cerebral tumour was wrongly diagnosed, and the condition revealed at the autopsy was perhaps remediable. It has been appropriately said that while it was easy to be wise after the event our endeavour should be to be wiser. This thought caused me to think over the case, and now to record it.

The patient, a shipping clerk, æt. 39, in a good position, was sent to me by Dr. McDougall. He was a married man with five healthy children. Strictly temperate, and no evidence or suggestion of syphilis. For some months he had been troubled with frontal headache, though not very severe, and occasionally had had attacks of vomiting without apparent cause. He mentioned also that his memory had been failing, and alluded to his inability to check his accounts; indeed, at the time I first saw him this mental failure was the chief symptom, the headache and vomiting having disappeared.

On examining him I found his speech slow and deliberate, there was slight tremor of the tongue, but not of the lips or hands. His gait was practically normal though the strength impaired. There was no ataxia, no Romberg's sign and the knee-jerks were also natural. The pupils were equal and reacted normally, vision was excellent, the optic discs were, however, slightly blurred.

In order to test his memory and also his handwriting a short passage was dictated. This had to be read almost word for word before he could grasp the sense; the writing was slow and painful, the words were misspelt, the misspelling consisting in a redundancy of the letters. It was evident that there was a great mental deterioration. The diagnosis made was organic brain disease, perhaps tumour, possibly general paralysis. I saw the patient again at his home several times; his condition rapidly became worse, within a month he had sank into comple mental hebetude, and had lost all capacity of appreciating his surroundings; he also passed his excreta in the bed, and was found then to have marked double optic neuritis with hæmorrhages. A little later the mental blankness had passed away and was replaced by delusions. No paralysis could be found, and no disorder of movement in the limbs, though the weakness was profound. He also developed slight but distinct exophthalmos in the left eye. He slightly improved, but towards the end of the second month the mental hebetude again increased, and death occurred suddenly about fourteen weeks after I had first seen him.

During the progress of the case it was thought that the diagnosis of tumour was justified.

No operative interference was suggested first, because there were no localising symptoms; secondly, because the mental state seemed too profoundly affected; and, thirdly, because the patient did not suffer any pain.

Autopsy.—Permission was obtained to examine the brain. The skull and dura mater were normal, the lateral ventricles were found to be very greatly distended with clear fluid. The choroid plexuses were congested and their veins tortuous; the small veins lining the walls of the ventricle were also clearly distended. The ependyma was throughout normal, smooth and glistening.

The foramen of Monro was considerably dilated.

The aqueduct of Sylvius was opened longitudinally, and in its whole course seemed patent. In the floor of the fourth ventricle there was, however, evidence of a pathological process. The normal delicate ependyma was replaced by a rough, raised, lustreless formation, which microscopic examination showed to be inflammatory vascular connective tissue. It could not be definitely ascertained whether this formation had occluded the foramina which are said to be normally present. There was no growth or any other abnormality found within the cranium.

The case, therefore, was one of acquired hydrocephalus in the adult.

The diagnosis of this rare condition is of importance, because it appears that puncture of the ventricle might have at least considerably alleviated the patient.

Internal hydrocephalus appears under several morbid conditions: (1) as part of any meningitis, (2) as the mechanical consequence of tumours, &c., (3) as the ordinary infantile or congenital hydrocephalus, (4) as a result of epidemic cerebro-spinal meningitis.

This case, however, appears to belong to the class studied first and chiefly by Quincke, and called serous meningitis. An excellent description is given by Oppenheim in his "Lehrbuch," and an exhaustive paper has been published by Kupferberg. English authors have also written about the disease, though not very fully. Quite recently, in the Spring number of *Brain*, Parkes Weber describes several cases, and gives an excellent account of the condition.

Are there any points which may lead one to distinguish the case from that of cerebral tumour with which it is usually confounded?

1. *Duration.*—In some cases the illness lasts longer than is usual for tumour, and its progress is characterised by intermissions. Oppenheim mentions a case in which the symptoms continued for eight years.
2. The skull may be enlarged, and this fact suggests the nature of the disease.
3. Absence of localising symptoms, or if the cranial nerves in the anterior fossa are affected by pressure the resulting paralyses are of a fluctuating character.
4. The following symptoms may have value, and were present in my case:—Slight exophthalmos, fine tremors of tongue, hands and lips, weakness, without definite palsy of the legs.
5. Examination of the fluid obtained by lumbar puncture may be important; the recognition of cell elements would suggest a meningeal origin. The significance of albumin is varied. As a rule the figures collected by Weber show that there is not much albumin present; on the other hand, I have known tumour formation to be accompanied by a very considerable amount of albumin in the cerebrospinal fluid.

As to the ætiology practically nothing is known; perhaps, as Weber suggests, it may be compared with serous effusions into the pleura or peritoneum, but for a discussion of this and other theories the reader is referred to that writer's paper (*loc. cit.*). What I wish to emphasise is, that the disease is one which it is perhaps possible to diagnose and to relieve.

References.

Quincke.—*Deuts. Zeit. f. Nervenheilkunde*, 1897. Vol. ix., pp. 149-168.

Oppenheim.—Lehrbuch der Nervenkrankheiten.

Kupferberg.—*Deuts. Zeit. f. Nervenheilkunde.* Vol. iv., p. 94.

Weber.—*Brain*, Spring, 1902.

ASTHENOPIA. *(a)*

By E. KENNETH CAMPBELL, M.B.Ed.,
F.R.C.S.Eng.,
Surgeon Western Ophthalmic Hospital, &c.

Asthenopia is a convenient term to express that condition of "weak sight" which may exist, visual acuteness being good, either in emmetropia or ametropia *after the proper correction by glasses has been used.* Whilst the ordinary text-books discuss fully the treatment of the various forms of refractive errors, they usually deal quite inadequately, or else too diffusely, with that large group of cases comprised within the term "asthenopia." The following series of articles is intended as an exposition of the subject in its entirety:—

Principles.—When an object is looked at, the two eyes are involuntarily, and simultaneously, directed to it in such a way that its image falls upon each of the two yellow spots, and the straight line extended from the centre of the object looked at to the centre of its image formed on the yellow spot, is known as the *visual axis.*

The adjustment of the two eyes so as to bring the yellow spots into alignment with the object looked at is termed *fixation.*

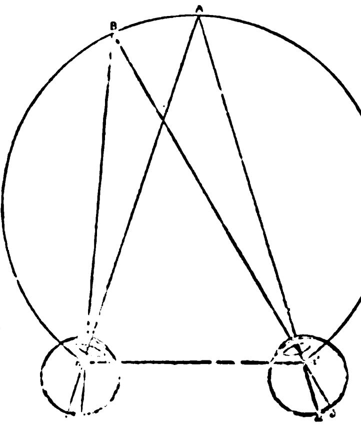
Central, Direct, or Yellow-spot Vision.—All parts of the retinal image outlined upon the yellow spot are exact, sharp, and well-defined.

Ex-central, or Indirect, Vision—An image outlined on the retina at a point away from the yellow spot, is less and less exact and sharp the farther off it lies from the yellow spot, in accordance with the principle that the sensitiveness of the retina decreases progressively from the yellow spot to the periphery.

Identical, or Corresponding Points.

Although two retinal images of an object are formed, yet only *one is seen.* This is due to the fact that for each given point in one retina there is a corresponding point in the other physiologically identical with it, the two mutual points always acting together. If the two eyes move together in perfect unison the two retinal images, falling upon "identical points," are fused into one mental image, and so the object is seen as a single one. The psychological process involved therein constitutes *binocular single vision.*

If, on the other hand, the two eyes do not move together in perfect unison, the images of an object will fall upon non-identical parts of the two retinæ, and so *diplopia*, or double-vision, results.



A, point of fixation the retinal images of which are formed at a; a^1 b b^1 are identical points, ∴ the distance ab = the distance $a^1 b^1$. n, n^1 = the nodal points. The angles a n b, $a^1 n^1 b^1$, = each other and likewise to the opposite angles, A n B, A n^1 B. Also in the triangles B C n, A C n^1, the opposite angles at C are =; ∴ in these triangles the remaining angles at A and B are =. ∴ the point B by which the corresponding images b, b^1 are formed must lie in the arc of a circle passing through the points B, n, and n^1. Similarly, it can be shown that any other point forming corresponding images on the two retinæ will lie in the arc n A n^1.

The image seen by the fixing eye is exact and sharp *and in its right place*, because it falls on the yellow spot: it is termed *the true image.* On the other hand, the image seen by the non-fixing eye is less distinct and sharp than the other, *and is in its wrong place*, because it falls on the retina away from the yellow spot: it is termed the *false image.*

Diplopia is known as *homonymous* when the false image is on the same side as the non-fixing eye, and *heteronymous*, or *crossed*, when it is on the same side as the fixing eye, the false image formed on the non-identical point of the retina of the non-fixing eye *being projected into that position in space from which it has been educated to receive a stimulus.* So that the double images would be homonymous or heteronymous, according as the lines of fixation intersect in front or behind the fixed point.

Stereoscopic Vision (*Gr.* stereos—solid, skopeo—I view).—A judgment of the first two dimensions of space, length and breadth, can be formed by the one eye alone. For stereoscopic vision, or the judgment

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(*a*) *Gr.* asthenes—weak, ops - sight.

of the third dimension, *i.e.*, the depth and solidity of an object (perspective), the aid of the other eye is necessary (binocular single vision), as the two images on the two retinæ constitute two slightly different pictures, the sum of which = stereoscopic vision.

Varieties of Ordinary Diplopia.

Name.	Image of R E as contrasted with that of L E.	Caused by a pathological deviation.	Caused artificially by a prism held, base.	Corrected by Turning.	Corrected by prism held, base.
Homonymous diplopia	On R side	Either eye inwards	In before either eye	Both eyes outwards	Out before either eye
Heteronymous (or crossed)	On L side	Either eye outwards	Out before either eye	Both eyes inwards	In before either eye
Right diplopia	Below	R E up or L E down	Up before R E or down before L E	R E down and L E up	Down before R E or up before L E
Left diplopia	Above	R E down or L E up	Down before R E or up before L E	R E up and L E down	Up before R E or down before L E

Monocular Vision.—In certain cases of diplopia, usually those which develop in early life, the patient can cultivate the habit of ignoring the false image. When this is so, the condition of sight is that of monocular vision, or vision with a single eye, which implies the negation of stereoscopic vision.

Orientation is the faculty by means of which we are enabled to see objects in their right place. If the two eyes be directed forwards, an object situated to the right of the visual axis has its image to the left of the yellow spot, an object situated to the left of the visual axis has its image to the right of the yellow spot, and the same applies, *mutatis mutandis*, to objects situated above and below. We mentally refer objects to their proper relative positions in the external world by the psychological action of *projection*, which we learn by experience and the aid of the muscular sense, *i.e.*, the knowledge of the exact degree of nerve-force necessary to control the normal action of individual muscles.

False projection, or seeing objects in the wrong place, is the result of an erroneous idea being formed as to the position of the eye due to the loss of muscular sense in consequence of paralysis of one or more of the ocular muscles. It generally causes visual vertigo.

Tests for Binocular Single Vision.—The existence or absence of binocular vision may be ascertained in several ways.

(*a*) Take patient into a dark room and require him to fix a lighted candle held six metres off in the median horizontal plane, and cover first one eye and then the other with a card. If the patient fix the object accurately, no deviation of the eye behind the cover will be noticed, nor when the cover is removed. Suppose, however, that one eye does deviate, then on placing the cover in front of the fixing eye, *a movement of adjustment* will be observed to take place in the other eye so that it may fix the object.

(*b*) *Prism Test.*—Place in front of one of the eyes a prism of 10°, base down, and direct patient to look at a candle-flame situated at a distance of six metres, and on the same plane with the eyes. If binocular single vision exists, *vertical diplopia* is induced, *i.e.*, two images will be seen, one standing over the other, If the prism cause no diplopia, this is evidence of the absence of binocular vision.

One of the best proofs of the presence or absence of binocular vision is the experiment with falling bodies known as the

(*c*) *Stereoscopic Test of Hering.*—This is conducted by means of a long tube, inside which is extended a vertically-placed thread. The patient is directed to look through the tube with both eyes, while glass beads are dropped, sometimes in front, and sometimes behind, the thread. If binocular vision be present, no mistake will be made with regard to the true position of the beads with respect to the thread; while on the contrary, if only monocular vision exist, frequent mistakes will be made in judging of the proper situation of the beads.

Movements of the Eyes. The Eye Muscles.

The movements of the eyeball in the orbital cavity may be likened to those of a ball-and-socket joint, the globe as a whole undergoing no change of position but rotating round an immovable point, *the centre of rotation* (situated on optic axis 11 mm. from vertex of cornea).

Field of Fixation indicates the limits of movements of the two eyes, *the head being kept still*, when directing them to the four points of the compass. *It is the sum of all those points in space which the eyes can dominate.* It is measured by the perimeter in the following way: Fix patient's head on the "rest" with the eyes directed to the zero-mark, and one screened. Then move test-types along the quadrant from the periphery towards the centre, and note the exact position in which the letters can be read distinctly, recording the result on the perimetric chart. In the normal eye the field is about 45° upwards, inwards and outwards, and about 55° downwards.

Movements of Eyes.

The *primary position*, or *position of rest*, of the eyes, is that in which, with head erect, the visual axes are parallel, horizontal, and directed straight in front. This is the position of rest, and all other positions are *secondary*. (*a*)

The secondary positions are movements of rotation

(*a*) It is to be understood, however, that this statement applies strictly speaking to emmetropia alone, for according to Stilling, in the large majority of cases of *hypermetropia* the eyes converge in a state of repose, while in myopia they diverge in a state of repose.

round three primary axes, which together form a co-ordinate system :—

(*a*) A vertical axis about which the movements are lateral, to the right and left.

(*b*) A horizontal axis, at right angles to (*a*), about which the movements are up and down.

(*c*) An antero-posterior axis, about which the movements are wheel-like or those of torsion, the upper end of the vertical meridian inclining inwards or outwards.

The visual axes are parallel when the object of fixation is distant (*i.e.*, 20 ft. or more), and converge to the same point when the object of fixation is near (*i.e.*, less than 20 ft.). Any other position of the axes is an abnormality.

Extra-ocular muscles.—The globe is rotated round its three principal axes by the individual, or joint, action of six muscles, all of which, with the exception of the inferior oblique, arise from the apex of the pyramidal-shaped orbit.

	Length of tendon.	Distance of insertion from cornea.
Internal rectus	8·8 mm. ...	5·5 mm.
Inferior rectus	5·5 mm. ...	6·5 mm.
External rectus	3·7 mm. ...	6·9 mm.
Superior rectus	5·8 mm. ...	7·7 mm.

—Merkel and Fuchs.

The muscles may be divided into three antagonistic pairs, one muscle of the pair acting like a bridle to the other, being in co-operative antagonism to it, viz. :—(*a*) External and internal recti rotate eye round vertical axis; (*b*) superior rectus and inferior rectus rotate eye round horizontal axis; (*c*) superior oblique and inferior oblique rotate eye round antero-posterior axis.

External rectus rotates the eye outwards.
Internal rectus „ „ inwards.
Superior rectus „ „ upwards and inwards.
Inferior rectus „ „ downwards and inwards.
Superior oblique „ „ downwards and outwards.
Inferior oblique „ „ upwards and outwards.

While rotation vertically upwards is produced by the combined action of superior rectus and inferior oblique, and rotation vertically downwards by the combined action of the inferior rectus and superior oblique.

To be quite correct, it must be understood *that only the internal and external recti of the one eye are genuine antagonists*, in the sense that if one is paralysed the result is the same as if the other had contracted. With regard to the remaining pairs of muscles, there is no such thing as a perfect antagonism between them; for example, the superior oblique cannot be strictly regarded as the true antagonist of the inferior oblique, nor the superior rectus of the inferior rectus. To put the matter briefly, the antagonist of one of these muscles is not solely the other muscle which rotates the eye round the same axis in an opposite direction, but would be represented by the sum of the forces exerted by several other assisting muscles which act as opponents.

The muscles are innervated by the third, fourth, and sixth nerves, the motor neurons of which are located along the floor of the aqueduct of Sylvius and the forepart of the floor of the fourth ventricle. These motor neurons are under the control of a higher co-ordinating centre, which in its turn is connected with a supreme voluntary motor centre in the cortex.

(To be continued.)

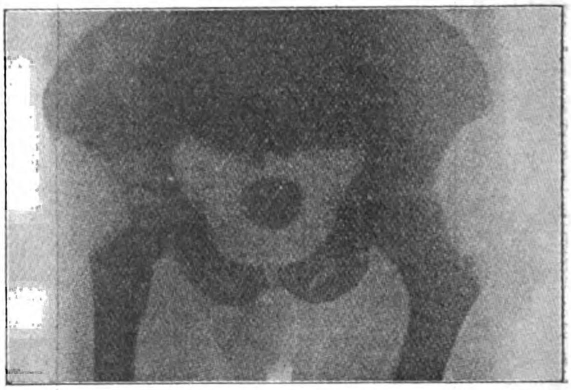
The Nature Study Exhibition was opened by the Duchess of Devonshire at the Botanic Gardens on July 23rd, and will remain open until August 5th.

NOTES ON THE OPERATION OF SUPRA-PUBIC LITHOTOMY, WITH SKIAGRAPH SHOWING STONE IN THE BLADDER.

By DENIS KENNEDY, F.R.C.S.I.,
Surgeon to the Children's Hospital, Temple Street, Dublin.

J. D., ÆT. 3, was admitted to the Children's Hospital, Temple Street, on November 15th, 1901. For the previous twelve months he had complained of pain on passing water, and for the previous three months his pain had increased very much. In hospital he suffered a good deal for some minutes previous to micturating, and was in great pain all through the act. On examination under an anæsthetic a stone was easily felt with a sound, and could also be felt per rectum. He had well-marked phimosis.

Being anxious to test the value of skiagraphy for diagnosis in cases of stone, I had the X-rays applied, and the skiagraph here published is the result. The stone is seen lying about the level of the true pelvic brim, having evidently gravitated to the fundus of the bladder, as the boy was lying on his back for the operation. It was nearly the size of a small hen's egg.



On considering what operation I should do for the relief of the condition, I decided to do a suprapubic lithotomy, although I am well aware that many cases of successful crushing, even in very young boys, have been recorded by Messrs. Keegan and Frere. The reasons I decided not to do litholapaxy in my case were the following:—First, the size of the stone, as was shown in the skiagraph, would make the operation prolonged and difficult. Secondly, on account of the stone showing so well in the skiagraph, I was of opinion it was made up of hard material, such as oxalate of lime. Thirdly, it is difficult to get a lithotrite and evacuating catheter small enough to pass through the urethra of a young boy, and at the same time to be effectual. And, lastly, the comparatively few cases of stone in boys we meet with in Dublin, makes it difficult for a Dublin surgeon to acquire the necessary skill to manipulate the lithotrite without danger of injury to the urethra and bladder, which are so delicate in these young subjects. In the Children's Hospital, Temple Street, during the past year, we had only four cases of stone in the bladder out of close on 3,000 cases that were attended at the hospital, either in the wards or in the out-patient department. Even this is nearly a record number, as one or two in the year is the usual number.

In comparing the suprapubic with the perineal route, I consider the former has many and decided advantages over the latter. In suprapubic cystotomy the operation can be carried out deliberately step by step; we know exactly what we are cutting; a much larger stone can be extracted; if the wound in the bladder is closed, as can be frequently done, union takes place in a few days, and the dangers of the operation should be less than in the perineal method. During the past year I have performed the suprapubic operation three times, all on boys under four years, and in each case the patient was fit to be up on the eighth day, as soon as the stitches were removed, the wound being then perfectly healed.

In carrying out the suprapubic operation in this and other cases, the details which I consider worthy of notice and which differ from the usual routine are: First, I used no rectal bag; instead, I put the patient in the Trendelenberg position. On incising down to the bladder I found the peritoneum well drawn up leaving ample room for extracting the stone without interfering with that membrane. Secondly, instead of using a hook to lift up the bladder and hold it in position, I passed two temporary silk sutures through the muscular coat, one just below the reflection of the peritoneum, the other above the pubes. By this means my assistant was enabled to keep the bladder well forward against the abdominal wall, the danger of the bladder falling back into the pelvis was obviated, the stone was extracted with greater ease, and suturing of the bladder wall was carried out with accuracy and rapidity. The plan is recommended by Kocker. Lastly, I sutured the wound in the bladder with interrupted Lembert's sutures, and in each case obtained union by first intention.

As a skiagraph of a stone in the bladder is rarely possible to obtain, I need scarcely apologise for publishing this one. The stone was made up completely of phosphates. The boy left hospital cured on the twelfth day after operation.

A CASE OF ASCENDING PARALYSIS. (a)

By ALFRED R. PARSONS, M.D.Dub., F.R.C.P.I.,
Physician to the Royal City of Dublin Hospital, and to the National Hospital for Consumption.

In 1859 Landry published a paper based on ten cases of ascending motor paralysis. He named the condition "Paralysie Extenso-Progressive" or "Paralysie Ascendante Aiguë." Subsequent writers have described the disease under the latter of these terms, or often for sake of brevity as "Landry's Paralysis." In one of the ten cases which proved fatal on the ninth day no lesion was found in the brain or spinal cord. Landry, influenced by the negative results of this autopsy and by the absence of bed-sores, urinary troubles, and pain in the back in all the cases, suggested that the possible cause of the paralysis was to be sought for in some disease of the nerves. The hypothesis that paralytic phenomena not produced by cerebral or spinal disease may arise from some lesion of the nerves was not propounded for the first time by Landry. It was a distinguished member of the Irish School of Medicine, Robert J. Graves, who first suggested that extensive paralysis without any lesion of the brain or spinal cord may arise from disease commencing and originating in the nervous extremities alone.

Notwithstanding the numerous advances in neuropathology during the past forty years since Landry suggested that the nerve-trunks were the seat of the lesion in his cases, it must, I think, be admitted that the riddle of the pathology of Landry's acute ascending paralysis is still unsolved.

The comparative rarity of cases of ascending paralysis and the obscurity of their nature will, I trust, be a sufficient excuse for presenting to this Academy the following clinical record:—

J. M., æt. 38, by occupation a labourer, was admitted to the Royal City of Dublin Hospital on Saturday, September 21st, complaining of weakness in his arms and legs. He states that the first symptom he noticed was a numbness in his feet extending to just below the ankles, about 12.30 p.m. on Saturday, September 14th. He went home at 5.30 p.m. and put his feet into hot water to try if he could stop this feeling, but obtained no relief. On Monday, September 16th, the numbness had advanced half-way up his calves, but his walking power was not interfered with. On the following day the numbness extended to a little above his knee, and he found that he could not walk as well as formerly. By Wednesday the numbness had reached his umbilicus, and as the difficulty in walking was more marked, he consulted my colleague, Mr. Moore, at the extern department, who kindly directed him to come to my dispensary on the following day. The weakness in his legs was so evident on Thursday that he was unable to go to work. He walked into the consulting-room of the extern department with manifest difficulty. There was then no appreciable loss of power in his arms, but when asked to sit on the edge of a table for the purpose of examining his reflexes, and then told to jump down, his legs gave way under him and he had considerable difficulty in preventing himself from falling. On Thursday night, the numbness went up along his sides and down his arms, and on the following Saturday, one week after the commencement of his symptoms, he was admitted to hospital. He was able, though with considerable difficulty, to walk into the hospital, and on the day following he walked from the ward to the lavatory, a distance of twenty-five yards, without assistance. On September 23rd and 24th, with help from a couple of men, he was able to walk the same distance, but on September 25th he was quite unable to get out of bed.

Previous History.—He served as a soldier for some years, and was discharged owing to an injury to an eyelid, the result of a gunpowder explosion. He states that he never had syphilis. His family history is good, and the only point noted about his personal habits is that he usually drank from four to six pints of porter a day.

Physical Examination.—On September 25th and subsequently, a detailed examination of his nervous system was made.

Cranial Nerves.—Functions intact and nothing abnormal detected, except slight fibrillary tremor in the tongue.

Upper Extremities.—These can be moved freely in all directions, but the grasp is feeble in each hand, and if the patient be directed to keep his arm flexed and an attempt be made to extend it, the muscles yield, and the limb is too readily straightened. There is no wrist drop; in fact, the wrist can be extended against slight resistance. Co-ordination and sensation to touch and pain seem perfectly normal. A pin can be picked up off a hard surface without difficulty. Muscle sense is also normal. Among the vaso-motor and trophic phenomena it was noted that the hands were cold and clammy, that the skin was normal, but that the muscles were flabby. The muscles reacted perfectly to the faradic current.

Trunk.—(1) Thorax: Movements were good. The diaphragm moved well. No loss of sensation to pain, touch, or temperature. Percussion and auscultation revealed nothing abnormal. (2) Abdomen: Spleen not palpable. Area of splenic and of hepatic dulness normal. Full control over bladder and rectum. The patient is, however, unable to sit up in bed except by raising himself on his elbows and then supporting himself on his hands. Sensation to touch, pain, and temperature was normal over the abdomen. The superficial abdominal reflexes were not obtained, but there was no difficulty in eliciting the cremasteric reflex. There was no pain in the spinal column.

(a) Read before the Medical Section of the Royal Academy of Medicine in Ireland, May 16th, 1902.

Lower Extremities.—The loss of power is not absolute in the lower extremities. Movements are, however, extremely feeble, and prevented by slight resistance, except adduction of the thighs, which is fairly good. There were no sensory disturbances. The superficial and deep reflexes were abolished. The feet were cold and covered with perspiration, and the muscles were flabby.

The loss of power in the leg, arm, and trunk muscles became more and more marked, so that he was unable to separate his legs if they were placed in contact or to raise himself in bed. His hands, however, did not become absolutely paralysed, and, at his worst, if his dinner were cut up for him and placed on a chair at his bedside, he could by rolling on his side and getting his face nearly into contact with the plate introduce the food with a spoon into his mouth.

October 14th.—Mr. Arthur Benson examined his eyes and found the light reflex normal, that the pupils contracted for accommodation and the fundus was also normal.

October 15th.—Some indications of returning power in the lower extremities were noticed. He could slightly flex the limbs so that the posterior surface of the knee was six inches from the bed. He could separate his heels to a distance of seven inches by working them out along the bed. He could not raise the heels off the bed, but if separated he can approximate them. The plantar, abdominal, and epigastric reflexes were still absent. The calf and thigh muscles were somewhat wasted, and were tender on firm pressure. He was unable to sit up in bed, and there was little power in the upper extremities. Sensation to touch, pain, and temperature was unimpaired.

October 19th.—Muscles of upper and lower extremities contracted on faradic stimulation.

October 24th.—He was able to be propped up in bed with pillows for dinner. The day following he was able to raise his right leg more than two feet off the bed, but his left heel only one inch.

October 26th.—For the first time in his illness he complained of a great pain and tenderness in the calf of the left leg. A few days later this calf seemed a little fuller than that of the right leg.

November 3rd.—Pain in calf of each leg, which was so severe that it kept him awake the previous night. Two days later he was free from pain, and on the 17th he was allowed up.

December 8th.—He could nearly stand alone, and was able to walk a little without aid.

January 18th.—Rapid progress since last note. The patient could walk well, could stand on either leg, and nearly hop. The knee-jerks were still absent, though tone and nutrition of muscles were good. He was discharged from hospital.

April 8th.—He walked up to the hospital to know if he might work on roofs. The knee-jerks were still absent.

April 11th.—He felt perfectly well, except that he was more tired after his work than formerly.

The treatment adopted in this case was massage and stimulating liniments for the upper and lower extremities, and strychnine in increasing doses was administered internally.

The chief features of this case may be briefly summarised as follows:—A feeling of numbness commencing in the soles, gradually spreading upwards, and in a few days involving the trunk and arms. Three days subsequent to the onset of sensory symptoms there was loss of power in the legs. This motor paresis likewise extended upwards, involved some of the trunk muscles and the upper extremities, but did not affect the muscles of respiration, the muscles connecting the head with the trunk, or any muscles supplied by the cranial nerves. In the paralysed parts careful examination failed to reveal any loss of sensation to pain, touch, or temperature. There was abolition of the superficial and of the deep reflexes. The muscles were rather flabby, they wasted slightly, but maintained their faradic contractility. Vaso-motor disturbances were in abeyance, except the coldness and sweating of the hands and feet be regarded as such.

The most pronounced symptom in the case was an almost purely motor paralysis with abolition of the deep reflexes. In attempting to localise the lesion we may follow Sir William Gowers, who believes that the spinal cord is the part primarily affected, and that the terminal filaments of the upper motor neurons, as they are passing to the ganglionic cells in the anterior cornua, bear the brunt of the disease. In support of this hypothesis may be adduced the presence of histological changes in the grey matter in a few cases. It is furthermore favoured by the persistence of the faradic contractility in the muscles, the absence of any marked degree of wasting, and the comparative slightness of the sensory phenomena. On the other hand, this localisation does not seem to satisfactorily explain the long duration of the absence of the knee-jerk, which "in the majority of cases does not return until all paralytic symptoms have disappeared" (Gowers). Influenced by this fact, and by the similarity in the ætiology of cases reported as Landry's disease, and the well-recognised causes of multiple peripheral neuritis, some recent writers (Ross, Bury, and Osler) feel, as indeed Landry himself did, that the lesion is more probably in the nerves than in the spinal cord. If this latter view be correct, we may imagine the disease to be produced by one, or possibly several, toxic substances which have the property of acting mainly on the lower motor neurons, and slightly, if at all, on the sensory neurons.

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INFANT LIFE PROTECTION. (a)

By T. N. KELYNACK, M.D., M.R.C.P.,

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THE subject of infant life protection must be approached in a truly scientific spirit. Around it cluster many problems. Progress may be secured by different methods. It will not necessarily come by insistence on the promulgation of the views of any particular school. While considering special phases of the question it is very necessary not to ascribe to one particular agency the whole effect of a plurality of causes.

Gloomy facts have to be faced: the birth-rate is steadily falling, the infant death-rate is excessively high, and the multiplication goes on apace of those who from weakness of body or feebleness of mind are unfitted to play a useful part in the up-building of the State.

According to the recent returns of the Registrar-General, the births registered during 1900 were equal to a rate of 28·7 per 1,000 persons living. This is the lowest rate on record, and is 1·3 per 1,000 below the mean rate in the ten years 1890-99. The rate has decreased year by year since 1895, when it stood at 30·2 per 1,000. (*a*)

(a) Abstract of Introduction to a Discussion on the Protection of Infant Life, at the International Congress for the Welfare and Protection of Children, London, Wednesday, July 16th, 1902.

It is well to remember that in England the maximum birth-rate was 36·3 per 1,000 of population in 1876. This marked and rapid fall in the birth-rate is undoubtedly due to a "deliberate and voluntary avoidance of child-bearing on the part of a steadily increasing number of married persons." (*b*)

In the year 1900 the proportion of deaths of infants under one year of age to registered births was 154 per 1,000, against an average of 153 per 1,000 in the ten years 1890-99. It is important to notice the marked variation and wide range in different parts of the country:—"Seventy-nine in Rutlandshire, 91 in Dorsetshire, 94 in Wiltshire, 100 in Oxfordshire, and 106 in Herefordshire, to 175 in Warwickshire, 176 in Nottinghamshire, 178 in Staffordshire, 179 in the East Riding of Yorkshire, and 180 in Lancashire."

But it is not wise to attempt to prove too much from figures. Statistics have their limitations. Our present methods of computation are open to many objections, and much care is necessary to avoid arriving at imperfect or actually fallacious conclusions.

It must also be remembered that an immense amount of injury is constantly being wrought to mothers and children which cannot be adequately indicated in annual statements, but the proof of which lies buried in blue books, hospital returns, and reports of medical officers of health, or stored up in the private note-books of inspectors and visitors working in connection with various philanthropic institutions.

In studying the problem as it presents in England it is well to remember that it is one which more or less concerns all parts of the Empire, and therefore the principles guiding action should be such as can be of universal application.

And it is well also to recognise that many other European countries are face to face with this problem. (*c*)

France especially is making great efforts to arrest the depopulation of the country and to adequately protect its children. (See the valuable monograph of MM. les Drs. Ballestre et Gilletta, of Nice: "Etude sur la Mortalité de la première Enfance dans la Population urbane de la France de 1892 à 1897" (1901); and Dr. Pierre Budin's reports on the same in *La Revue Philanthropique*, 10 juillet, 1901, and 10 janvier, 1902.)

The law associated with the name of Roussel has sought to secure legal protection for the infants of France, and although unsatisfactory in some ways, nevertheless provides for a certain degree of medical inspection of nursed children, and in other ways has undoubtedly proved beneficial.

In Russia it is said only 732 infants out of every 1,000 born survive their first year. Here however, the mortality in towns is said to be less than among the peasantry.

In America much is being accomplished for the preservation and betterment of infant life.

And even in the Argentine Republic (*d*) and other countries little known to us efforts are being made to secure legal protection for infants.

Even under the best possible conditions considerable infant mortality occurs. In Norway, which can boast of having the lowest infant death-rate among European countries, it is 100 per 1,000. In certain agricultural districts in this country, it is less than this, although the average proportion of deaths of infants under one year of age to registered births during 1900 was 154 per 1,000. (*e*)

It is necessary to insist on a division of infantile deaths into those from what may be called (1) natural causes, *e.g.*, those which in the present state of our knowledge, and with our limited means of control, are considered non-preventible; and (2) avoidable or strictly preventible causes. Roughly speaking, the natural infant mortality may be taken as being about 100 per 1,000, although, with increasing knowledge, this will doubtless be lowered.

The chief influences making for excessive infantile mortality arise from the ignorance, inexperience, apathy, carelessness and neglect of the mothers, or those having the care of the children. Improper feeding, insufficient clothing, and general domestic mismanagement account for much of the excessive mortality. Among the infantile diseases arising from ignorance and neglect, the most important are the acute inflammatory disorders of the alimentary tract, summer diarrhœa, respiratory affection, tuberculosis, various infectious diseases and numerous nutritional disorders.

The death-rate of illegitimate children is exceedingly high. While illegitimate births form less than 5 per cent. of the total number of births, yet the inquests on illegitimate children under one year of age amount to 31 per cent. of the inquests held on infants. (*a*)

In many instances these illegitimate children are the offspring of degenerate parents, the mother is commonly immature, and often both physically and mentally deficient, and "not infrequently attempts at abortion have been made during early pregnancy." In many cases there has been much mental worry, anxiety, and recklessness during the pregnancy, and in not a few there has been a neglected confinement. In some instances the infant is born with a distinct taint, and not infrequently is the subject of congenital disease. In short, it is necessary to recognise that there are special ante- as well as post-natal causes for the excessive mortality of the illegitimate infants. (*b*)

Much has been said respecting the employment of pregnant and nursing women in factories. Undoubtedly the local differences in the infant death-rate may in great part be explained on this ground.

Dr. Reid (*c*) has shown that marked differences exist in the infant mortality rate of the northern and southern towns of the county of Stafford, and that there had been an increase in the infant death-rate of nearly 27 per cent. in those artisan towns in which married women were largely engaged in factory labour. Factory life is undoubtedly prejudicial to the pregnant woman, highly detrimental to the nursing mother, and proves a serious danger to the welfare of the child. Much of infant mortality and sickness, the blighting of physical growth of the child, and stunting in its mental development arises from the neglect to which the child is exposed consequent on the employment of the mother in the factory. The practice is fraught with danger to the race. Restrictions such as that which makes it illegal for a mother to return to work within one month of confinement are intended to benefit the mother rather than secure conditions for healthy development of the child. (*d*)

Factory work certainly discourages suckling. Many sanitarians have advocated the extension of the period of one month to three months, thus as far as possible securing natural feeding for the infant during the most precarious period of its existence. It is interesting to note also that in France efforts have been made to make it illegal to employ a pregnant woman for three months before her confinement.

In only too many instances the neglected infant of the one generation becomes the neglecting mother of the next.

While one cannot help sympathising with the objects of those who would greatly restrict or wholly prohibit the employment of female labour during the child-bear-

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(*a*) Sixty-third Annual Report of the Registrar-General of Births, Deaths and Marriages in England, 1900. (1902.)

(*b*) "Hygiene and Public Health." By Arthur Newsholme, M.D. (1902).

(*c*) See Compte-Rendu du Congrès international pour l'Enfance. Budapest, September 13-17th, 1899. (1901.)

(*d*) See *La Revue Philanthropique*, 19 aout, 1901. P. 502.

(*e*) "Diseases of Children." By H. Ashby, M.D., and G. A Wright, F.R.C.S. Fourth Edition. (1899.)

(*a*) Jones (Hugh): *Journ. of the Royal Stat. Soc.*, 1894.

(*b*) Papers prepared by Dr. Tatham for the Select Committee on Infant Life Protection Bill, 1896, show that the percentage of illegitimate births in 1845 was 7 per cent. In Salford (1877-94) the mortality of legitimate infants was 175 per 1,000, while of illegitimate infants it was 371 per 1,000 illegitimate births.

(*c*) *Lancet*, August 24th, 1901. See also Professor Oliver's "Dangerous Trades." 1902.

(*d*) A month is the period of abstention from work prescribed since 1891 under the Factory Act.

ing and nursing period, it is necessary to remember that the grave social and economic difficulties which surround the present situation are such as to render the application of stringent measures at present peculiarly dangerous.

In regard to the employment of women in factories, workshops, or in home work, it would seem best that, at least at present, efforts should be directed not so much to the negative side of prohibiting and restricting work as to the positive side of securing improved conditions for the workers. It would be advantageous if measures could be found whereby working mothers could be encouraged to nurse their infants. Even Spain can teach us something in this respect, for there employers must allow "one hour in the ordinary period of employment (from which there must be no deduction from wages) to nursing mothers to nurse their infants. This hour may be divided into two separate absences of half-an-hour, and may be fixed at pleasure by the mother, whose only obligation is to notify the time she chooses to the overlooker. (*a*)

As far as I can gather, the restrictions are such that at the present time there is but little encouragement to insure an infant from criminal motives.

Alcoholic habits in the parents, and particularly alcoholism in the mother, is peculiarly prejudicial to healthy infant development. As illustrating the risk of accidental death directly arising from acute alcoholism I need only refer to the observation of Dr. Hugh R. Jones, of Liverpool, who has shown that "The parallelism between the figures relating to drunkenness and suffocation in bed is extraordinary." (*b*)

There is reason to believe that the custom of administering opiates to infants still prevails to a very dangerous extent.

In seeking to secure a more adequate protection for child life there is need for private and public effort, domestic, municipal and national enterprise.

State control must necessarily prove ineffective in practice unless supported and enforced by public opinion. Any interference beyond that recognised as righteous by the conscience of the community can hardly be expected to result in lasting benefit. And while proclaiming the importance of national or collective responsibility it is very needful to enforce the claims of individual or personal duty. A healthy public opinion might do much to strengthen existing laws relating to protection of child life, and more should be done to encourage philanthropic, humanitarian and religious effort to adopt scientific procedures in their measures for prevention, restoration and amelioration. The propriety and right of the State to enforce compliance with sanitary laws and to protect the helpless has long been recognised.

Something has already been accomplished by judicious State interference.

The Infant Life Protection Act of 1897 has undoubtedly been of much service, and indirectly has proved of considerable educational value. It is much to be regretted that local apathy and indifference has done much to limit its usefulness. But practical experience has shown that the Act is too restricted in its application, and that there is urgent need to extend and amend the same.

The more important extensions of the provisions of the Act now much required may be briefly indicated:

1. The abolition of the distinction made in the present Act between one and more than one infant. The dangers to the life of each individual infant taken in to nurse are of the same nature, and arise from the same causes as those to two infants.

2. The abolition of the distinction made in the present Act in consideration of a sum of money paid down. In the case when a mother can afford to pay down £20 the nature and needs of a baby, and the dangers to which it may be exposed, are precisely the same as in the case of a baby where a mother cannot afford to do so.

3. It is also desirable to amend the Act in order to render any person failing to notify the reception of an infant adopted in consideration of a lump sum payment to fine as well as to forfeiture of the amount received.

4. It is also desirable that notice should be required to be given of all changes of residence of a person having the care or custody of children within the Act.

5. It has also been proposed that the age limit of protection should be extended to under seven years. Probably to under five years would be sufficient.

6. It has also been urged that it should be provided in the Act that in any proceedings taken under it in any court it should not be necessary that the name of the mother of a child on whose behalf they are taken should be disclosed.

Objections have been raised in certain quarters to the inclusion of one-child cases under the Act, but after careful consideration and consultation with those engaged in the best forms of rescue work and the conduct of the most successful children's homes and movements for the care and protection of children, I am convinced that such objections must not be allowed any serious weight when compared with the immense advantages which would accrue both to mother and child from the proposed extension of the Act.

Investigation seems to prove conclusively that where the conditions are suitable for the care of infant life inspection is not only not objected to but actually welcomed, and certainly those women most solicitous for the care of their offspring do not complain of a supervision when they understand that it is for the benefit of their child.

The principal of one of the most successful homes in the country writes me as follows:—"A well-managed institution would not find itself in any way hampered by inspection, and often the official oversight would be a valuable check upon the institution itself."

Of course, inspection will be useless, or it may be actually prejudicial, unless efficiently carried out. Only intelligent, tactful women, with experience and some common sense, should be employed. Mere man is quite unsuited for an inspector where babies are concerned. And it must be remembered that inspection, so called, should form but a part of the work of the inspector. The preventive and educational aspects of inspection must not be overlooked. The inspector should be capable of serving as instructor and adviser. Medical women might be of much assistance in this work. Certainly every inspector should be well informed concerning the hygiene of infant life, and must be acquainted with all the perplexities and dangers of artificial feeding. She should also have had some practical experience in nursing, and possess a working knowledge as to medical requirements. But while seeking for strict control over all infants nursed for profit, it must be realised that baby farming, as it is sometimes called, when rightly conducted, may be not only a legitimate, but even a praiseworthy occupation. Everyone taking a child to nurse for profit should be registered.

There is reason to believe that in some cases at least ill-directed measures to secure the safety of the child have tended to encourage the vicious life of the mother.

The provision of skilled obstetrical assistance for the poor would undoubtedly go far in saving life and preventing disease. In seeking to secure hygienic necessities for healthy development, while assistance may rightly be expected from legislative measures, chief reliance must be placed on educational effort. Some persons take interest in the question now under discussion, mainly for the sake of the mothers, others more particularly for the sake of the children. The point of view should not be thus restricted, for the subject is of national importance. Efforts should be made to ensure rational instruction in hygienic principles in all public schools, particularly to girls. Detailed instruction in the conduct of domestic duties should form an important part in every girl's training. Much may be done by personal and private enterprise. Judicious house-to-house visitation by unpaid workers has proved of service in many districts. Much good might be accomplished if it were possible to increase the number of suitable women inspectors.

Formation of local infant life protection societies is

(*a*) "Dangerous Trades." Edited by Dr. T. Oliver. 1902. Pp. 54.

(*b*) Dr. Hugh R. Jones, *Jour. of the Royal Stat. Soc.*, March, 1894.

to be encouraged, and in some large cities much good has been accomplished by the voluntary efforts of ladies' health societies and the like. It is a pleasure as well as a duty to acknowledge the good work being accomplished by various humanitarian, philanthropic and religious organisations. The "Settlement" movement especially is one which should do much in bringing hygienic enlightenment to many a dark district.

In many centres the public health authorities provide means for the spread of accurate knowledge regarding the care of children. Not a few hospitals are doing much good educational work in the dissemination of information respecting the rational nursing of infants. But the scientific feeding-bottle is not popular, and the old-fashioned death-dealing feeding-bottle with its filthy tubing still reigns supreme in many a home.

There is need for education in every section of society. Women in all ranks of life should be taught to realise the duty of nursing their own offspring.

It seems unfortunate that English prejudice and the economic conditions prevailing in this country prevent the adoption of a system similar to the German compulsory assurance method, whereby the working woman, while prevented from working owing to childbirth, receives a sum equal to half her ordinary daily wage. But while philanthropic attempts to establish day nurseries merit approval, it is well to remember that such efforts are mainly symptomatic and palliative.

There is need to adopt progressive measures. We must shake ourselves loose from our constitutional British lethargy, break away from national prejudices and the insular habit of mind, and admit the necessity of learning in relation to this matter from our Colonial brethren, our American cousins, and our Continental neighbours. In America the municipal supervision of the milk supply of such cities as Chicago has resulted in an immense saving of child life.

In Berlin, scientific care in the distribution of milk during the ten years 1890 to 1899 is said to have produced a reduction of 13·6 per cent. in the infant death-rate.

It is interesting to note that efforts are being made to obtain adequate training for nursemaids. The risks to the infants of the well-to-do from the ignorance of nurses is apt to be overlooked.

In not a few places provision is made with advantage for the supply to the poor of properly sterilised and suitably modified milk.

All rational efforts to check the spread of alcoholism, particularly among women, and to mitigate the evils flowing therefrom should receive vigorous support. Every effort which seeks to encourage personal and public hygiene is deserving of sympathetic consideration.

In conclusion, it may be safely affirmed that the excessive infantile mortality, subnormal development and actual disease in children is to a great extent the outcome of avoidable causes, preventible conditions, and removable influences. Ignorance is the chief ætiological agent, and to education we must look for the surest way of relief, and the only adequate channel whereby we may secure national efficiency.

Clinical Records.

A CASE OF ACUTE INFLAMMATION OF THE BLADDER, WITH PELVIC CELLULITIS IN A PATIENT SUFFERING FROM ADVANCED BRIGHT'S DISEASE:

ON BOARD H.M. HIRED TRANSPORT "TAGUS."

By LOUIS VINTRAS, M.D.,

Late Medical Officer to the Ship; Physician to the French Hospital.

G. A., troop-storekeeper, was taken ill on August 4th, 1901, while the *Tagus* was returning to the Cape from New Zealand, where she had taken back the 4th and 5th Contingents of the troops sent from that Colony. He complained of pain across the loins, a dull pain deep in the pelvis, and there was much tenderness over the bladder. His skin was dry, his tongue furred, and his temperature 102°. He told me he had been suffering for some years from kidney trouble, and a year and a half before had been in hospital for several months. During the outward voyage he had felt ill, but had had no time to attend to himself. We had had an almost unremitting series of storms on the outward voyage, and while crossing the Southern Seas the weather had been bitterly cold, it being then mid-winter in those regions. He also admitted having drunk heavily while we were in Wellington. His urine was smoky, and contained one-third of albumin. The next day his temperature was 104° in the morning and 103° in the evening. His pulse was quick. He passed a sufficient quantity of water. On the 7th his condition improved, and his temperature, which was 102° in the morning, fell to 100° in the evening; the skin began to act and the bowels were kept freely open. On the 8th the improvement was maintained. Unfortunately, he was a man of very active habits and very desirous to be about; feeling so much better he left his bunk when alone, several times during the day, and sat up in his quarters. In the evening the pain in the pelvis returned more acutely, and his temperature, which had remained at 100°, began to rise, reaching during the night 101·6° and the next morning 102°. By midday it was 103°. The urine was quite dark with blood, shreds of mucous membrane were present and its odour was offensive. There was great tenderness over the bladder and on each side, more especially the right. A No. 4 gum elastic catheter was passed with difficulty, as there was an old stricture, and the bladder was washed out. The temperature in the evening was 103·5°.

The next morning the tenderness over and around the bladder was even more pronounced, and on the right side there was distinct redness of the skin, and there was some puffiness over the pubes; but no sign of localised pus at any point. The bladder now ceased to react properly, and there was some retention. On trying to pass the catheter again, there was much irritability and spasm, and hot flannels had to be applied, after which a No. 2 gum elastic was introduced with difficulty. This was tied in, and the urine allowed to flow constantly through a long tube to a receptacle under the bed. The water was now exceedingly offensive, and there was a thick sediment. A marked feature of the case was the patient's comparative freedom from pain. The penis and scrotum were now œdematous; the redness of the skin on either side of the bladder had increased and assumed a mottled appearance. On the 11th the temperature was 101·2° in the morning, 102·5° in the afternoon, and 102° in the evening. The œdema of the scrotum having increased, punctures were made which relieved the swelling a little. On the evening of the 13th the skin of the scrotum began to slough and the patient's breathing became impaired. There were signs that the inflammation was gaining the abdomen. There was still hardly any pain and notwithstanding the intensity of the inflammatory process and the extent of the tissues involved, the patient repeatedly declared himself to be comparatively easy. He died on the 15th, when his breathing which had improved the day before had again become stertorous. He remained fully conscious and took nourishment to within two hours of the end. The patient was a thin, weak-looking man of thirty-two, with the facies peculiar to those suffering from wasting diseases. The general treatment consisted of antimony, digitalis, nux vomica and dilute hydrochloric acid every four hours, with five-grain doses of quinine twice and later three times a day. The bowels were kept freely open. The diet consisted of beef tea, milk, chicken and fish; while stimulants, port and brandy, were given at regular intervals. Hot fomentations were applied every two hours to the abdomen, and when sloughing began the parts were dressed with cyanide gauze and iodoform.

The points of the case are the intensity and rapidity with which the morbid process extended, involving the whole walls of the bladder from the first and extending to the surrounding cellular tissue and to the entire pelvis, apparently killing right away the tissues debilitated by long-standing disease, without localising itself at any one spot and affording any guide as to possible surgical interference. The cellulitis appeared to coincide with the onset of the cystitis.

France.

[FROM OUR OWN CORRESPONDENT.]

Paris, July 27th, 1902.

Cardiac Affections and Cactus Grandiflorus.

According to Professor Zeleusky, cactus grandiflorus, recommended in heart affections of every nature, was more particularly beneficial in aortic lesions. Although it produced certain favourable results in mitral disease, such as attenuation of the dyspnœa and increase of diuresis, yet they were only transitory, and modified in no way the circulation. It was quite otherwise in the case of affections of the aortic orifice; the cactus grandiflorus moderated the irregular rhythm of the heart, and caused to disappear œdema and ascites when present. As to the preparations of the drug, he preferred the fluid extract to the tincture, and gave thirty drops three times a day.

Beer Yeast and Pulmonary Affections.

According to Dr. Lardier, the administration of beer yeast constitutes an excellent agent in the treatment of acute and chronic bronchitis in the aged. In the case of the former, as soon as the acute stage had passed and the patient began to expectorate, dry yeast at the dose of two or three teaspoonsful daily considerably diminished the secretion, and in one or two weeks the patient was convalescent. In old catarrh cases, no matter how abundant was the expectoration, the employment of the yeast produced a rapid decrease in the bronchial secretion, and finally a complete cure in the space of two to three weeks. However, in order to ensure the result, M. Lardier recommended the drug to be continued for ten or fifteen days longer. Further, those who are predisposed to the affection were advised to have recourse to the yeast for one month at the beginning of winter and that in the absence of any symptoms. At the period of defervescence in pneumonia of aged persons, our *confrère* recommends the same treatment, claiming for it the best results.

The yeast is given in the dry state in water or milk or in the form of wafers, if the taste was obnoxious to the patients.

Meningitis.

Professor Tripier, of Lyons, treats all cases of suspected meningitis with blisters to the head. The head being shaved, small blisters are applied every day. In the last series of six cases published, the treatment succeeded in arresting the malady. One of the patients succumbed to a relapse a year afterwards, however, but the second time no blisters were used.

M. Tripier is of opinion that in every case where the patient shows symptoms resembling that of meningitis *au début*, a series of blisters should be applied to the head without waiting for confirmation of the diagnosis, otherwise the malady might gain a point which would render all treatment useless.

Appendicitis.

M. Dieulafoy communicated a case, before the Academy of Medicine, of a young man, æt. 25, who was suddenly seized with abdominal pain in the night-time; the following day he arose as usual, but his sufferings became so great that he had to return to bed, and feeling worse he was admitted to the hospital, with a temperature of 102° and considerable pain in the right iliac fossa. Laparotomy was immediately practised, and the appendix found to be the seat of gangrene. The organ was resected, and a small abscess discovered behind the cæcum was drained. In spite of the operation, the patient never rallied. At the autopsy no signs of peritonitis were discovered, but the kidneys were the seat of acute nephritis of toxic origin apparently. This fact would lead us to suppose that appendicitis should be attributed to intoxication rather than infection. Consequently such cases should be operated immediately, otherwise the patient would be exposed to the gravest danger.

It was said, continued the speaker, that operations *à froid* gave superior results to operations *à chaud;* the fact was true, but the question should be considered from another point of view. In order that a patient be operated *a froid*, he must naturally have survived the acute stage of his appendicitis, and that happy result is not always certain to take place. For him he advised the operation to be performed on the third day, at the latest, after the first symptoms of the affection.

Austria.

[FROM OUR OWN CORRESPONDENT.]

Vienna, July 26th, 1902.

Hæmoglobinæmia, Hæmoglobinuria and Hæmocytolysis.

At the "Gesellschaft für Innere Medizin" Hammerschlag showed preparations of blood taken from a patient who had suffered from erosion of the pancreas following gastric ulcer, ultimately producing hæmoglobinæmia, hæmoglobinuria and hæmocytolysis.

The patient was a female, æt. 36, who, suffered from ulcus ventriculi with secondary ectasia of the organ. After a long stay in hospital, hoping that careful supervision would soon restore the morbid condition to a healthy state, she was suddenly attacked with severe hæmatemesis, succeeded on the following day by an alarming collapse. In two days later the hæmorrhage was repeated. About twenty hours after the collapse hæmoglobinuria was observed for the first time, and two days later she died.

The examination of the blood showed large quantities of blood corpuscles with yellow annular margins named by Taube "Blutkörperschatten," indicative of hæmocytolysis. In addition to these there were numerous nucleated red blood corpuscles both normal and megaloblasts; relative increase of leucocytes, nucleated with neutrophile granulation. This led on the first glance to a diagnosis of leucocytosis, but the presence of the yellow annular corpuscles and the absence of any eosinophile cells were against any such conclusion. It is worthy of note that there was every appearance of rapid blood regeneration.

The post-mortem revealed an old contracted cicatrix, causing a stenosis of the pylorus, with a deep ulcer on the posterior wall of the stomach, which had eaten into the pancreas and caused a good deal of erosion, which was the probable cause of the hæmocytolysis, hæmoglobinuria and hæmoglobinæmia. In consideration of the interest in the poietic function of this organ, Klein tested its hæmolytic power in the laboratory; the extract was powerfully hæmolytic.

Kaufmann said that he recently had a somewhat similar case come under his notice with the hæmorrhagic diathesis and icterus.

The patient, a female, æt. 22, who, according to the history, had suffered the previous years from some affection of the stomach, associated with severe pain after food, which disappeared after three weeks' treatment on milk diet alone. From this recovery she seems to have been in good health, performing her daily duty till fourteen days before admission to hospital, when she was complaining of rheumatic pains in the upper and lower extremities. A week later pain commenced in the stomach, slight at first, but gradually increased in intensity, accompanied with a deep yellow colouring of the skin a few days before admission. It came out later that the patient had had bloody stools and vomiting, as well as bleeding from extremities. On her admission she was icteric, highly anæmic, but free from all fever. On the upper and lower extremities there were large hæmorrhagic patches, some of which were as broad as the palm of the hand.

The liver was greatly enlarged, but not painful to pressure; in the epigastrium a tumour covering the area of a gulden, flat, and lying over the aorta. All the other organs were healthy. The hæmorrhage seemed to be due to a secondary anæmia of a severe nature. A few days later blood began to come from the genitals, and ceased in the digestive tract under the free use of gelatin. On a rise of temperature commencing the red blood corpuscles fell to 1,300,000 with 15 per cent. of hæmoglobin, and finally the patient died on April 28th.

During the illness Professor Mannaberg suggested the cause to be carcinoma of the pancreas, which was confirmed at the post-mortem. A large ulcer in the stomach had perforated the pancreas, where cancer was found, which accounted for the hæmorrhagic diathesis. The compression of the ductus choledochus through the extension of the carcinoma and infiltration was the evident cause of the icterus.

Anæmia Recurrens.

Breuer next showed a case of recurrent anæmia of a severe type. The patient was now æt. 42, and visited Nothnagel's clinic in 1898 for the first time. In 1888 she seems to have suffered from fever of a recurring nature, as she relates two attacks of fever in the same day, probably malaria. From 1896 to her admission into hospital she seems to have been pale in complexion, but no real pain or other disturbance till the week before admission, when she was seized with severe palpitation, sickness, vertigo, weakness, and extreme paleness.

On admission the anæmia was severe:—Hæmoglobin, 20; red blood corpuscles, 2,300,000; white corpuscles, 4,900; microscope showed alterations in the erythrocites with individual normo-blasts. There were present systolic murmur, hard spleen two finger breadths below the margin of the ribs. Nothing particular about stool or urine—no parasites. During her six weeks residence she was treated with iron and arsenic, which appeared to be successful from the rapid improvement that set in after the third week. On January 5th she was dismissed, when the hæmoglobin was found to be 83 per cent.; red corpuscles, 5,000,000; and white, 7,000. During the next 3½ years she had seven similar attacks occurring without any attributable cause. The first of these occurred about half a year after leaving hospital, when she returned on the first symptom appearing, remained ten weeks, and was again dismissed.

The cause of this anæmia was somewhat enigmatical, but presumptively, pernicious in character. The blood examination since the second admission into hospital has had the following peculiar characteristic—on leaving a decided oligocythæmia or high colour index; on reception the red blood corpuscles were marked by poikilocytosis, with a large number of microcytes and a moderate number of megaloblasts. The improvement progressed regularly without any crisis, although always found to be 100 per cm. in hæmoglobin and 4,400,000 macrocytes were constantly present. The white corpuscles contained 50 per cent. of lymphocytes. At present the patient was recovering from an attack, but whether to state the case as one of pernicious anæmia as the primary cause of these relapses was very difficult to determine, as it was one of those anomalous cases lying on the border line.

Banti's Disease.

Breuer brought before the notice of the Society another case of a young woman, æt. 23, who up till two years ago was perfectly healthy, but after this period began to gradually enlarge over the abdomen.

Neither malaria nor syphilis had ever been present. A year ago the enlargement was diagnosed as a splenic tumour, whereupon arsenic was freely administered for a few months without success. More recently she complained of extreme weakness and pain in the back associated with palpitation.

On her reception into hospital a hard splenic tumour was easily palpated over the symphysis pubis in the middle line. The liver was slightly enlarged but smooth, with slight œdema of abdomen. No glandular swellings; accidental systolic murmur; lungs, normal. The blood had 58 per cent. of hæmoglobin, 2,800,000 red corpuscles, and 1,800 white corpuscles, or a proportion of 1,600 to 1. Beyond this leucocytosis there was a slight relative lymphocytosis. In the urine was found a large amount of urobilin and gall-colouring matter. There were temporary attacks of icterus in hospital, but under arsenic treatment the colour improved, but the tumour remained the same although the blood changed:—Hæmoglobin 72 per cent., red corpuscles 4,000,000, white 1,270, or proportion of 3,100 to 1. The complex symptoms with successive leucohemia pointed to an advanced form of Banti's disease.

The Operating Theatres.

KING'S COLLEGE HOSPITAL.

Wound of the Subclavian Artery.—Mr. Carless operated late one night on a woman, æt. about 30, who had been admitted a few hours before with a revolver wound on the left side of the chest. She had been quarrelling with her husband, a Russian Pole, and he, holding the revolver under his hand so that it pointed upwards, shot her in the left side. This occurred about three o'clock. Severe hæmorrhage ensued, but this was apparently controlled after a time. When seen at half-past nine on the same evening Mr. Carless found her somewhat blanched; there was no pulse at the left wrist, and a pulsating swelling was observed occupying the left infra-clavicular fossa; this swelling was about three and a-half inches in diameter, and the tissues near it were somewhat ecchymosed. The aperture of entrance was about two centimetres in diameter, and the tissues around were lacerated, it was situated about two inches to the left and a little above the left nipple, so that it lay close to the anterior axillary fold. The passage of a probe along the wound was checked by the soft tissues. The patient was anæsthetised, and it was then found that the bullet had passed upwards and inwards, towards the middle of the clavicle. A crescentic incision was made, passing through the wound and extending from the inner end of the clavicle nearly to the acromion process. The flap thus marked out was turned up, and it was then found that the bullet had passed deeply between the pectoralis major and the deltoid muscles. This space was opened up, and on retracting and partially dividing the pectoralis major a tense bluish black swelling came into view. On passing the finger deeply so as to define the structures, this swelling burst, and a forcible jet of bright arterial blood was shot out over the apron worn by the operator. This hæmorrhage was at once controlled by an assistant who was waiting to compress the subclavian artery above the clavicle. The parts were carefully separated, the pectoralis minor being drawn outwards, and various bleeding points, probably branches of the acromio-thoracic axis, secured. The dissection was extremely difficult, owing to the tissues being infiltrated with blood, but finally it was found that the bleeding came from the subclavian trunk just below the clavicle as the artery lay on the first rib. A small portion of the inferior wall, half an inch in length, had been shot away. The aneurysm needle was passed under the vessel, which was tied above and below the lesion. On releasing the subclavian trunk above the clavicle it was found that the hæmostasis was complete. The axillary vein came into view during the dissection, and was seen to be very much distended. The patient had lost a considerable amount of blood during this procedure, as the pressure on the subclavian artery had to be relaxed every now and then "to give the surgeon a show" as to where the bleeding came from; it was therefore considered inadvisable to make any attempt to find the bullet. A drainage tube was introduced leading down to the site of ligature, and the wound was rapidly stitched up. During this procedure two pints of warm salt solution (ʒ to a pint) were slowly injected high up the rectum through a catheter, and as soon as the operation was over the median basilic vein in the right arm was opened and a pint or more of the same fluid at a temperature of about 108° was introduced. The wound was dressed and the patient put back to bed, with instructions to have the left arm wrapped up in antiseptic wool and slightly raised. Mr. Carless remarked on the unusual character of this case. It would hardly seem possible, he said, for a patient with a wound of the subclavian artery which was not tied or controlled to live for six hours; he pointed out that had the artery been wounded above the clavicle through a direct passage to the surface the woman would certainly have bled to death. As it was she lost so much blood that the doctor who first saw her had given her but a few minutes to live, and had proceeded to take her dying declaration. The immediate hæmorrhage ceased partly as a result of the diminished heart's action, but mainly as a result of the tension of the tissues around the artery. Behind was the chest wall; above the clavicle and subclavius muscle; externally the coracoid process and pectoralis minor, and in front the costo-coracoid membrane, through which only a small opening had been made by the bullet, so that the escape of the blood was checked after a time. The pulsating swelling which was felt beneath the clavicle before the operation was evidently caused by the stretching of this structure beneath the pectoralis major, and as soon as it was opened up by the finger the bleeding recommenced. Mr. Carless commented on the fact that these operations are frequently difficult and prolonged. It was easy to say "tie the bleeding point," but it was quite a different matter to do it. He also pointed out the necessity for a double ligature in this instance, as otherwise bleeding would recur from the lower end as soon as the collateral circulation was established.

It is interesting to report that the patient has done well; there has been no recurrence of the bleeding and no gangrene of the arm; the patient complains of pain in the arm above the clavicle, which is probably due to the presence of the bullet irritating the brachial plexus, which, however, it does not appear to have seriously damaged as there is no actual evidence of nerve lesion. Later on the bullet will be looked for with the X-rays and, if necessary, removed.

NORTH-WEST LONDON HOSPITAL.

Short Circuiting the Intestine for Chronic Dysentery.—Mr. **Mayo Collier** operated on a man, æt. 31, for the last seven years the subject of chronic and apparently incurable dysentery. The condition of the patient being apparently hopeless, and drugs failing to give relief, Mr. Mayo Collier advised that the ileum near the caput cæcum coli should be brought to the surface and used as a temporary anus until the colon should heal, thus short-circuiting the alimentary canal. Mr. Collier made an incision in the median line between the umbilicus and the pubes of about four inches in extent. The abdominal cavity was opened and the colon examined as far as practicable. Nothing definite was made out from this examination, A loop of the ileum about six inches from the valve was brought into the wound and supported by a glass rod being passed close to its mesenteric attachment. The bowel was then attached to the four corners of the wound by four silk stitches. The extent of the original opening was curtailed by deep and superficial sutures at the upper and lower extremities of the wound. Mr. Collier said he intended opening the piece of bowel so fixed on the fourth day and washing out the colon daily so as to assist its healing. By these means he thought the dysentery will probably abate and disappear. Subsequently the loop of bowel will be detached from the abdominal opening by an oval incision, the edges of the opening in the bowel pared and closed by gut sutures, and the loop replaced in the abdominal cavity.

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WEDNESDAY, JULY 30, 1902.

PAID SPECIALISTS IN DISPENSARY PRACTICE.

A year ago the attention of the medical profession in the United Kingdom was focussed upon Birmingham, where a curious drama was being enacted; a private organisation having convinced themselves that it was desirable to provide at half fees general and special consultation for persons unable to pay full consultation fees. This Specialist Consultative Institute, as it was named, advertised broadcast and appointed a consultant. The latter gentleman, however, speedily found himself subject to the disciplinary hand of the General Medical Council by reason of the general advertisement above mentioned. Had there been no advertising it seems more than likely that the proceedings of the Consultative Institute would have met with no effectual check. However, after a sharp reproof and warning from the General Medical Council, the medical man in question determined to sever his connection with the Institute rather than sacrifice his diploma. While this dispute was in progress feeling ran high in the medical profession not only in Birmingham but also throughout the kingdom. The withdrawal of the "Consultant" and the collapse of the Institute were hailed with general satisfaction, for it was felt that the right of the profession to regulate its affair in accordance with certain ancient and honourable traditions had been amply vindicated in the teeth of a strenuous and powerful attack. The echoes awakened by the incident, however, have not yet died away. It is not too much to say that the cause of professional organisation has been greatly strengthened thereby. The latest outcome appears to be a scheme which proposes to attach a modified consultative staff to the General Dispensary of Birmingham, a medical charity that carries out a vast amount of good work among the poorer classes. It is now proposed to attach four consulting surgeons and four consulting physicians to the dispensary, together with two gynæcologists and one ophthalmic surgeon, all of them to be paid by fees. We shall watch the progress of this new departure, assuming it to be adopted at the annual meeting of the charity in February, 1903, with considerable interest. Meanwhile, the proposal to extend the principle of payment for services to the consultant staff of medical charities demands the interested attention of the profession, to say nothing of the philanthropic public. Turning to the general question of the services of medical men to medical charities we have little hesitation in expressing an emphatic opinion that an honorarium should in all cases be granted in return for such services. Where no such recognition is accorded, the hardship falls with peculiar severity upon the younger members of the staff, that is to say, precisely upon those who are least able to give their services gratuitously. The senior who has fought his way to position and fortune has no need of any honorarium from the funds of his hospital or infirmary. To ask the younger men of narrow incomes, however, to discharge those highly-skilled duties whereby the work of a medical charity is carried on, is, in our opinion, a vicious and inhuman system. In a great many instances, in London as well as in the provinces, the payment of a small honorarium, say, of fifty or a hundred guineas per annum, has been the rule to all members of the consultant medical and surgical staff. With all the huge resources at the command of the medical charities of the United Kingdom there would be little difficulty in meeting the small additional tax upon income. As things stand the noble cause of charity is administered largely at the cost of a band of professional men who can ill afford to give their services gratuitously. If it be right to recompense the house surgeon and other residents for their services it surely cannot be wrong to recompense the consultants in a similar way. A better organisation of the medical profession would enable it to urge these views upon lay executive committees and upon the public generally.

CRIMINAL DEGENERACY.

The year 1859, which initiated so many political and scientific revolutions, may be said to have given birth to the modern science of criminology. It was during the seething activity of the Italian wars, and the social, religious and political convulsions which led to the formation of a young "United Italy," that Cesare Lombroso commenced his epoch-making investigations in the department of the "study of mankind," with which his name is now connected for all time. It is one remarkable instance of the applicability of the fruits of his laborious investigations to the protection of human life at the opening of this democratic twentieth century of ours, that he diagnosticated, and predicted the future development of, the criminal tendencies of Gaetano Bresci, who afterwards murdered the King of Italy. This fact, with a vast number of other interesting ones, have been published in a medico-psychological study of the subject of political assassination which appeared in a recent number of the *Philadelphia Medical Journal* from the able pen of Professor Charles K. Mills. Inspired by the recent assassination of the President of the United States, Professor Mills has collected and analysed the facts recorded in connection with the fifteen most prominent political assassinations—beginning with that of Henry III. of France, and ending with that of President McKinley. His analysis is extremely subtle, although some of us may think that there are hardly sufficient data from which to draw so definite conclusions in some of the cases. But even in these his processes of investigation are instructive and always suggestive. He arranges his political assassins under four heads: *sane, insane, degenerate but not insane,* and *degenerate and insane.* Booth, the assassin of President Lincoln, was sane, but, an alcoholic degenerate. Charlotte Corday, the assassin of Marat, was another degenerate. So was Cesario Santo, the assassin of President Carnot of France. So, also, was Michel Golli, the assassin of Señor Canovas, the Spanish Premier. The assassin of the Empress of Austria was a "degenerate with criminal instincts." The assassin of King Humbert of Italy, to whom we have already referred, was a degenerate of moody temperament. Czolgosz was a degenerate, but probably sane. It is an interesting fact that Darwin published the results of his special investigations in the year in which Lombroso commenced his. The "Origin of Species" convulsed the scientific world in the year 1859, the thrilling year in which Garibaldi rose up to construct a United Italy, and Lombroso sat down to make anthropological measurements and moral dissections of criminal humanity. There can be no doubt that the results placed before the scientific world by our famous fellow-countryman suggested an outline, at least, of the life-work of the Italian anthropologist. The views and the results arrived at, as well as the lines of reasoning followed, have in the cases of both these remarkable men received the most scathing criticism from the hands of their scientific opponents. Yet even in the cases where the data of these great students of the mysteries of Nature are least perfect, or their lines of reasoning least consequential, there can be no question that their collected materials are worthy of the most careful attention; while the earnestness and persistency of purpose displayed by each cannot be denied by even the most bigoted opponent of either. Still it must be lamented that the dissipation of ignorance and the accumulation of scientific facts have by no means increased the moral self-restraint and the instinctive benevolence in the proportion which had been foretold by some earnest philosophers and progressive politicians. We now hear sanguine hopes expressed nearly every day that we are rapidly approaching a period when bacteria will be extinct, and disease a matter of past history. Let us express the hope that the attainment of this desirable consummation will be in a time when the mental and moral aberrations of man shall also have ceased to be a matter of personal experience.

Notes on Current Topics.

Cholera and Plague in Egypt.

THE news from Cairo is most serious as regards the outbreak of cholera. On the 26th there were no less than 95 fresh cases, and 93 deaths, while other towns are affected. On the 27th 52 fresh cases were reported, among them being several Europeans. Since July 15th there have been in all 469 cases, with 382 deaths. This represents a most serious state of affairs, especially when taken in conjunction with the invasion of plague. The total number of cases of plague throughout Egypt is 19. Of these 16 are in Alexandria and 7 are Europeans. Since April 7th there have been 269 cases of plague, with 152 deaths. The state of affairs arising from this dual invasion clearly concerns the safety of the whole of Europe, and may even give rise to widespread alarm and anxiety, especially in countries where practical sanitation does not reach a high standard of excellence.

The Woodbridge Treatment of Typhoid Fever.

IN the April number of the *Indian Med. Gaz.*, Major A. G. Hendley, I.M.S., has given his personal experiences of three cases of typhoid fever treated by the "Woodbridge method." The results obtained were decidedly favourable, and give just grounds for the demand that the claims which have been advanced for this method of treatment by its originator, Dr. Woodbridge, and borne out by reports in American professional literature, should receive the fullest attention from the medical world. The plague of enteric still remains among the most terrible physical scourges of India and South Africa; and yet Major Hendley tells us that he had been "unable to find, in back numbers of the *Indian Med. Gaz.*, any recorded results of treatment of typhoid fever by this method," and also adds that "none of my medical friends could give me personal experience of it." The claim of Dr. Woodbridge is, that his treatment, "if commenced early enough, will abort, shorten and greatly modify cases; that there is no tendency to relapse, no unfavourable complications; and that the bad effect of prolonged stimulation is done away with." The treatment is a general or intestinal eliminative one: it consists in giving very frequently—"every fifteen minutes during wakeful portion of first forty-eight hours"—small doses of varying formulæ of podophyllum resin and calomel combined with such antiseptics as guaiacol carbonate, menthol, eucalyptol and thymol; the indications being to produce free evacuations as early as possible, and by subsequently varying doses to keep the bowels regular. Ptyalism is avoided by discontinuing treatment on the fourth or fifth day, for one or two days; during which interval drachm doses of saturated chlorate of potash solution are given every three hours. Major Hendley's report is an eminently favourable one, and we should be very glad to hear of the results of the investigations of others regarding so important a therapeutic problem.

Murphy's Button.

An extremely interesting report of a post-mortem examination of the body of a patient who had, nearly seven years before, been the subject of a successful operation of gastro-jejunostomy—performed for the relief of the symptoms produced by enormous dilatation of the stomach—has recently been given by A. H. Cordier, M.D., Professor of Abdominal Surgery, University Medical College (Kansas City, Mo.). Professor Cordier made the "anastomosis" between the anterior wall of the stomach, about four inches from the pylorus, and a coil of the jejunum, fifteen to eighteen inches below that orifice. Murphy's button was used. At the autopsy, which the operator made nearly seven years afterwards, he found complete obstruction of the pylorus; the size of the stomach had been restored to the normal standard, and its coats were quite healthy; the loop of intestine between the pylorus and the anastomotic orifice had undergone atrophy from disuse. No traces of peritoneal adhesion existed around the site of the operation. The pyloric obstruction—which seemed to be valvular—prevented the contents of the stomach passing into the upper loop of intestine; it also prevented the regurgitation of bile into the stomach. Air or water could not be made to pass from the stomach through the pyloric orifice, till the stomach and the lower segment of the bowel had been fully distended. But the unique feature in this interesting history is that the Murphy's button which had been employed at the operation was found lying in the stomach, where its seven years' sojourn had never given rise to a single untoward symptom! One end of the button was very much corroded [digested?].

Holidays and Health.

The approach of the holiday season should remind medical men, as well as their patients, of the necessity for the observation of periodic times of rest and relaxation. There is no calling in life whose followers more surely require the religious observance of what days can be conveniently set apart for the vacuous purpose of performing no manner of labour therein. The continuously increasing hurry and worry of the twentieth century is infallibly adding to the roll of its neurasthenic victims—in approximately geometrical progression. In the medical profession there exists a unique combination of physical exposure with intellectual strain and mental anxiety. In a recent number of *The Journal of the American Medical Association* Dr. James H. McBride discusses "Some Points in the Management of the Neurasthenic," and makes some most instructive observations, followed by very excellent advice. He points out that "the possession of certain mental qualities in a high degree may render one more liable to brain exhaustion. I have known people who, though mentally and physically vigorous, became the subjects of brain exhaustion from the fact of their having an unusual ability for close mental application so profound and intense that they would go beyond their limits without knowing it." This fact is as surely true as it is usually unrecognised. And when such persons are simultaneously exposed to strains of physical exertion, stresses of wind and weather, and the harassing endeavours to please an implacable public, how deplorable the result is likely to be! Perhaps the best approach to a specific prophylactic in all such cases will be found in the careful obedience of the commandment: "Remember the holiday to keep it holy."

The Gulf Stream Myth.

The progressive march of science necessarily includes an iconoclastic crusade, and in this unprecedentedly active age of scientific investigation hardly any theory can be accounted safe from attack or unexpected revelation. One of the recent theoric victims which appears to be hopelessly doomed to wither under exposure to the penetrating glare of the search light of twentieth century science is the now rebaptised "Gulf Stream Myth." When the late M. de Lesseps was monarch of the engineering world, and planned the section of the Isthmus of Panama for the purpose of uniting the Atlantic and Pacific oceans, and the tunnelling of the Atlas range for the purpose of converting the scorching, sandy Sahara desert into a cool and smiling inland sea, the meteorological department of the scientific world was, in each case, seriously exercised by contemplation of the cataclysmic changes in the balancing of our globe on its axis; and in the distribution of surface temperature, which must inevitably follow the completion of either of these great undertakings. Since that stirring time speculation has simmered down to the old dead level; as it has been found that the Sahara desert, with the exception of two insignificant potholes, is a ridged plateau, placed well above sea-level; and the Gulf Stream is but a mythical agent, so far as influence upon the climate of the British Isles and the West Coast of Europe in general is concerned. And thus we find that the panic fear of a new glacial era for the British Isles to follow section of the Isthmus of Panama—was correspondingly groundless. Mr. H. M. Watts deals with the subject in the June number of *Scribner's Magazine*, and shows conclusively that the influence of the Gulf Stream on the climate of our shores is purely imaginary and mythical, and that the mid-Atlantic anticyclone is the agent which really determines the mildness of our temperature. The necessarily variable movements of this agent furnish, from time to time, "January thaws," "anticipations of spring," "early summers," "heat waves," "Indian summers" and "green Christmasses." The existence of the Gulf Stream itself—such as it is—depends on the aerial currents. So dies another meteorological myth!

The Race for Life.

The most "progressive" town of the most "progressive" community in our twentieth century world has recently been winning a new distinction as the most prominent "suicide centre." Chicago registered thirteen cases of suicide for the week ending May 10th, 1902, and fourteen for the following week. This record surpasses that of any other large city in the world, and represents a proportion to total population more than three times as great as that of the United States at large—which was already a notable one. The scientific and official authorities of Chicago attribute the gruesome prevalence of suicide to post-influenzal depression of mind; but, as a contemporary points out, the same cause has not in other places led to a corresponding result. The fact undoubtedly is that the race for life is far too fast in the rapidly growing midland capital of the great Western Republic. And we think it our duty to point out the *moral*—that the most advanced democracy has as completely failed to establish happiness and contentment among men as ever did the cast-iron despotisms of Oriental type, or even the ruthless autocracies of savage and cannibalistic tribes in Africa and Australasia. It is rather difficult for a disinterested observer, who sets himself to discuss the movements of the crowd from a "Jack Horner" position, to satisfy himself why our trans-Atlantic cousins so deliberately set out at the start of life with the transparent intention of racing one another to death, and of depriving one another, during the greater part of the course, of almost all chances of enjoyment of the very many comforts which the immense advances of recent years in physical and mechanical methods have placed within the reach of all. We would suggest that instead of looking *only* forwards towards the goal of the coveted "success," Chicago citizens—as a body—should waste some portion of their time in looking to either side, and even backwards.

Colour Vision of Egyptian Natives.

The subject of "The Colour Vision of the Natives of Upper Egypt" is dealt with in an interesting and instructive communication presented to the Anthropological Institute of Great Britain and Ireland, and published in the last volume of their *Journal*. Mr. Rivers took up the thread of an investigation which had been previously started by Mr. D. Randall-MacIver, and employed the same seven test-wools which he had used in his investigations in Torres Straits and elsewhere—bright red, bright green, Holmgren's pink test, Holmgren's pale green test, yellow, blue and violet, usually in the order named. The results showed that the fellâhin of Upper Egypt resembled the English in being less sensitive to red than to yellow. In this respect they differed from the Murray Islanders, but agreed with the latter in their "marked insensitiveneess to blue." Mr. Rivers observes that "the Egyptians seem to occupy an intermediate position between the Englishmen and the Papii, and resembling the former in one respect and the latter in another." He also notes that "the cases of marked insensitiveness to red (red-green blindness or red-green weakness) which occur in both England and Egypt were absent in Torres Straits." The existence of colour-blindness in both Egyptians and Englishmen appears to be accompanied by a certain degree of general insensitiveness to red as compared with Papuans. It is also a significant fact that the Murray Islanders had no native word for blue. The Egyptians had no *definite* term either; but there are two or more words which they applied indiscriminately to violet, blue, dark brown, and black. On the other hand pink and violet appear to be more readily matched by those inferior races than by Europeans. Each of these colours contains both red and blue, and are confused by individuals with weakness of the red-green sense. The *warm* tones, the *emotional* tints appeal most strongly to the savage sensorium. All readers are familiar with the oft-repeated judgment of the inexperienced blind man who compared scarlet to the sound of a trumpet. African explorers well know the value of flaring red and yellow items of apparel when preparing for a "palaver" with a native chief. Sir Joshua Reynolds mostly used these pigments. The old age of the nineteenth century carried civilisation across the spectrum to the bleached, æsthetic blue.

The Psychological Development of the Nation.

Much has recently been written, and still more has been said, respecting a change in the emotional attitude of the people, and alteration in the mental standpoint of the nation. It is certain that of recent years in certain sections of Society there has been a considerable improvement in the physical condition, and it is impossible to deny that evidences have not been wanting to show that some alteration has been slowly taking place in the psychological life of many of the community. The increasing congregation in cities, the incessant pursuit of pleasure, the freedom from restriction enjoyed by the young, the loosing of the bonds of parental control, the liberty claimed by females, and many other facts, have gone far in bringing about the psychological change. It cannot be denied that there is much in modern life tending to develop the neurotic. Neurologists are ever on the look out for fresh manifestation of the neurotic element. Neurosis now accounts for much of the ills which flesh is heir to, if many latter day "nerve specialists" are to be believed. And certainly alienists are constantly impressing upon us the depressing fact that mental instability is much on the increase, and that insanity is becoming alarmingly prevalent. It is true that to many an old-fashioned observer there are signs that many of the younger members of the community are lacking in restraint and manifest emotional display that is repugnant to the ancient British spirit. But when we consider the long period of stress and strain which has been borne by practically every family during the recent war, and estimate the disappointments and financial disasters brought down upon the people with tragic suddenness by the King's illness and the postponement of his Coronation, we have no hesitation in saying that the old spirit is still with us, and that psychological decadence has not robbed our people of those elements of patience, restraint and quiet perseverance which have built up a mighty empire.

Sentimentalism and Horses' Sun Bonnets.

Truly, in these humanitarian days it is not a little amusing to note how in many cases kindness is swallowed up in vapid unreasoning sentimentalism. There never was a more striking instance of this transformation than in the use of the sun bonnet for horses. It is true that horses die on hot days out in the sun, but it is equally true that they die on cold and wet days. In ninety-nine cases out of a hundred the poor brute dies of heart failure, induced by overwork. The majority of horses are overworked, both in speed, weight to be carried or drawn, and duration of hours of toil, to say nothing of their sufferings from hunger and thirst, the lash of the whip, the constant stoppages and restarting necessary in crowded traffic, and the torture of the bearing-rein. To put a sun bonnet on the head of this much-abused brute is a sheer mockery. There is no proof that any horse ever suffered from the effects of the sun's rays falling upon his head. Among the human race it is now a well-recognised fact that so-called "sunstroke" is due to a microbial invasion of the body; in other words, it is a kind of specific fever, and can be contracted in the shade. The Dumb Friends League, an excellent society, might husband its resources by declining to pander to the last fad of unreasoning sentiment which decks out the horses in the streets with millinery grotesque and unsuitable enough to gratify the soul of the most foolish of feminine leaders of fashion.

Post-Vaccinal Eruptions.

In a recent number of *The British Journal of Dermatology*, W. T. Freeman, M.D., F.R.C.S., has discussed the important subject of "Post-Vaccinal Eruptions," in a very interesting and instructive "Clinical Note." The first of his illustrative cases was that of a servant girl, aged 23. On the sixth day after vaccination nine shotty papules were found about the wrists and on the back of the hand on the left side. They were about to pass into the vesicular stage, and were found, two days later, to have become all vesicular or semi-pustular and umbilicated. They were all multilocular. They "dried up," after the fashion of ordinary vaccination vesicles and dark scabs formed, which fell off at about the end of three weeks. Dr. Freeman concludes that it was a case of generalised vaccinia. In another case, that of a lady teacher in a high-class school, an erythema commenced on the eighth day to spread from the inflammatory area around the vaccination pustules. It spread over the arm, and "the body generally." When examined, two days later, the whole body was covered with a multiform erythematous rash. "Here it deserved the term of Erythema papulatum, here that of E. tuberculatum, here the round patches and circles were those of E. annulare, and here and there segments of circles and wavy bands suggested E. gyratum." There were also present "one or two urticarial wheals, and a very occasional small bulla situated upon an erythematous base." There was moderate fever. The eruption cleared up in about a fortnight. Another, and more serious, case occurred in the person of a weakly male, aged 54, who became ill when the scabbing process was quite complete—at the end of the third week. The whole trunk was then red, and there were a few sudamina. Two days later the whole trunk was covered with a bullous eruption. The bullæ ranged from the size of a threepenny piece to an area somewhat larger than a five-shilling piece. Some were slightly hæmorrhagic. However, they all dried up, and the man was convalescent in a few weeks. There were some other cases—of a measly rash, and of an erythematous one. The record of such cases is instructive.

Diagnosis Puncture.

In these days of asepticism it is somewhat remarkable that the simple method of diagnosis by puncture with an exploring needle is not more extensively practised. The old way of exploring by a grooved needle was bad, inasmuch as it furnished a wound full of septic possibilities, but still it was better than nothing; Listerism, however, has changed all that, and the long fine needle of a carefully sterilised hypodermic syringe can be plunged fearlessly into almost any cavity in the body. Its chief use, perhaps, is in confirming a diagnosis of pleuritic effusion or of empyema of the chest. The careful medical man will never neglect the simple precaution of inserting his diagnosis needle before performing a paracentesis of the chest. As every surgeon knows, pus may often be loculated in the pleural cavity, and in that case may readily evade the probing incision of the surgeon, however cautiously directed. The puncture of a fine needle causes so little pain that there is no need, as a rule, even for a local anæsthetic. The only risk is that of breaking off the needle in the tissues, an accident sometimes caused by an abrupt movement on the part of the patient. If the operator be on his guard the risk of such an occurrence can be readily excluded.

The annual general meeting of the Brussels Medical Graduates' Association was held at the Trocádero on July 15th, when Dr. A. E. Snape was elected president.

Poor-law Patients and the Spread of Phthisis.

Although Hampstead is one of the healthiest and wealthiest districts of the Metropolis it is nevertheless saddled with a poor population and a workhouse. The resident medical officer of the district, if we remember aright, came into prominence some years ago as being the recipient of a microscopic salary. Hampstead is now in a quandary. The Board of Guardians has been advised to send the Poor-law phthisical patients out on the magnificent Heath, which, indeed, would be an ideal recreation ground for patients suffering from the particular malady in question. At a recent meeting, however, the Chairman pointed out the extreme danger of allowing these patients to go on the Heath, inasmuch as they gravitated to the public-houses. The medical officer favoured the proposal if patients carried expectoration bottles and were prevented from going to the public-houses. There the matter rests for the present. So far as the purity of the air is concerned the patients would be almost as well off in the grounds of the workhouse infirmary, and the safety of the public would be better guarded if they were kept within the lesser boundary. This sort of question in a more or less modified form is sure to crop up occasionally now that sanatoria for consumptives have been so generally established throughout the United Kingdom. From a preventive point of view there is little danger likely to arise from a consumptive patient straying at large over a heath, whereas on the other hand he becomes a distinct danger as a customer in a public-house.

What is "Introduction in the Sale of a Practice?"

An action recently tried by the Lord Chief Justice at the Manchester Assizes presents some points of interest to the medical profession. The claim was for £241 18s. 2d., the balance due on the sale of the practice of the late Dr. Kelty, of Blackpool, from whom the defendant, Dr. Carr, purchased the practice for the sum of £1,000. The action was raised by the executors of Dr. Kelty. The answer was a counter-claim by the defendant for damages for breach of agreement in non-introduction of the plaintiff to some of Dr. Kelty's patients, and for continuance of practice by Dr. Kelty contrary to a penalty clause. The latter part of the counter-claim appears to have been abandoned. With regard to the former, it appears that at the time of sale there were 253 patients on the ledger, but the purchaser alleged he was introduced to forty-six only, and that because they wanted medical assistance; at the end of six months, he further said, he was introduced to twenty-six other patients who were not on the ledger. On the other side the widow produced a list containing 156 names of persons who to her knowledge were introduced to Dr. Carr. With regard to a list of 140 persons whose names were taken from the ledger by Dr. Carr, and stated not to have been introduced to him, Mrs. Kelty explained that many were visitors, some were dead, and others had not been attended for a long time. The learned Judge expressed an opinion that Dr. Carr's counter-claim was an expression of irritation, and had not been proved. He therefore gave judgment in favour of the executors of the late Dr. Kelty for £241 and costs. The legal expenses of the dispute will naturally be very heavy.

Quicksilver—Re-quickened!

A remarkable example of recurrence to an old, and emphatically discredited, item of medical therapeusis is that which has recently been placed on record by Dr. J. McKean Harrison. This gentleman treated two cases of acute intestinal obstruction with *half-pound doses of quicksilver.* In each case laparotomy had been discussed; in one it was declined, and in the second, the octogenarian standing of the patient, and the exceptional severity of the symptoms, rendered all hope of its successful use untenable. In each case the administration of the ponderous metallic dose was followed, in due time, by amelioration of the symptoms, relief of the obstruction—as shown by the action of the bowels, and complete recovery. The introduction of this peculiarly ponderous agent produced no increase of the abdominal pain, and there was no attempt at the development of ptyalism. Reflection on these remarkable results makes one think that too many of the old remedies have been placed on the high shelf—and even forgotten there. We were not able to follow Dr. Harrison quite to his conclusion in the first of his cases, in which he had made a diagnosis of "volvulus," which he considers that the weight and fluidity of the quicksilver "must certainly have unravelled." In the former centuries, when quicksilver was the "regulation" treatment of intussusception, the theoretic explanation of its action was based on the mistaken idea that the telescoped segment of the gut always came from below; it was then, of course, dragged back by the weight. Surely the ways of quicksilver, therapeutic and other, have always been mysterious. Thomas Dover, the celebrated "quicksilver doctor," used to treat, successfully, cases of spasmodic asthma with *lb. wt.* doses of Hg.! Indeed, he cured, so he says, most acute diseases with this remedy. He made a special exception of gout, for which he invented his famous "Powder."

The Prevention of Consumption.

It has been fairly well impressed on the public by constant iteration that the prevention of tuberculosis is one of its primary duties. The chief difficulty now is to point out in what way the community should act to fulfil this duty, and, in particular, what are the functions of public health authorities. Several municipalities have devoted themselves more or less whole-heartedly to the anti-tuberculosis campaign, and in this, as in some other fields of sanitary work, Manchester seems to have taken a leading place. The initial step is the adoption of notification, and, although this is voluntary, every facility is given to induce medical men to notify their cases, and in addition sputum is examined gratuitously by the health authorities. Following on the notification of each case are endeavours to educate the patient and his friends as to the nature of the disease and its infectivity, and where possible disinfectant treatment of his surroundings is carried out, with subsequently a continued supervision. Thorough disinfection also follows when a death from phthisis, if the case has not been previously notified, is registered. In addition, important investigations are conducted as to the sources of infection, the circumstances influencing infection, and the habits of the patient and other predisposing causes. It is only by experiment that we can learn, and whether the Manchester scheme gives good results or not only time can tell, but none the less is great credit due to Dr. Niven for its origination and inception.

A Plague Spot in the Midst of Beauty.

ABOUT fifteen miles from the mouth of the estuary of the Shannon is the old town of Kilrush, a seaport and market town in the County of Clare, twenty-one miles from Ennis. In times past ships of war and lofty East Indiamen rode safely in the deep waters of its bay at all times of the tide. Nature has done much for the town, and philanthropists have not forgotten it. Erasmus Smith's Charity founded and supports a school there for 280 children. We need not tell of this further, our concern is with the present condition of this delightfully-situated town which (*Clare Journal*) is very bad as regards sanitation. Dr. Counihan has just stamped out an epidemic of typhoid fever in one of its back streets; and he makes the alarming, and we believe true, statement, that most of the houses are without any sanitary convenience whatever; and at their back runs an evil-smelling drain. All credit is due to Dr. Counihan for drawing attention to the utterly insanitary condition of the town. A town, which if it were kept tolerably clean would be one of the most attractive seaside resorts in the United Kingdom. In the centre of the wildest and most beautiful scenery in Ireland; mountain and wood and water, and ever and always the booming of the Atlantic surf waves as they surge against the cliffs of Clare. But all is made of none effect by the disregard of cleanliness of the people.

The Extern Examinerships at the Royal University, Ireland.

THE Extern Examinerships at the Royal University, appointment to which has been for so long a time delayed, have at last been filled, as will be found in our columns. The delay which occurred in this matter was principally due to the differences of opinion among the members of the Senate as to what should constitute an "extern examiner." As our readers know, it was desired by one party that medical men practising in Ireland should be ineligible, while another party considered such a proposal unfair to the Irish members of the profession. It would appear from the result of the election that a compromise has been arrived at on this important point, as two of the examiners are Irishmen and two reside in Great Britain. We trust that the appointments which have been made will aid in maintaining the standard of the Royal University examinations. We regret that the Senate did not see fit to appoint Irishmen in every case, but presumably where so keen a conflict of opinion existed some such form of compromise as that which has occurred was bound to take place.

The Gradual Failure of our Carbonic Acid Gas Supply.

THE great tendency to levelling-down, which so eminently characterises this scientific and disillusionising age, is displayed throughout the whole of the physical universe, as significantly and emphatically as it is in the social and intellectual arrangements on the surface of our own planet. Lord Kelvin demonstrated, years ago, that the temperature of our solar system was in the way of progression towards the hopeless depths of the absolute zero. The present state of the moon furnishes an instructive object-lesson of advanced progress in that direction; its physical condition was compared by the late Dr. Samuel Haughton to that of an over-boiled potato. Our own globe is surely, if slowly, cooling down to a corresponding condition, so that recent volcanic activities have at least the consoling feature that they show that the end is not to come in our time. It was first pointed out by Schlosing that the supply of CO_2 in our atmosphere was chiefly derived from volcanic craters and springs—that the proportion derived from animal life was comparatively insignificant. And, as volcanic activity is undoubtedly diminishing on our globe—Krakatoa and St. Pierre notwithstanding—the future failure of CO_2 will form one of the prognostic symptoms of the approaching abolition of life on our planet.

THE Annual Congress of the Royal Institute of Public Health meets at Exeter from August 20th to 27th.

THE annual shorthand examination conducted by the Society of Medical Phonographers will be held in May, 1903.

THE Nineteenth Congress of the Sanitary Institute is to be held in Manchester from September 9th to September 13th.

THE death is announced of Surgeon-General Graham Auchinleck. He joined the Army Medical Department in 1848, and was in active service during the Burmese War of 1852, and in 1857 he was stationed at Mean Meer, when the Sepoys revolted, on which occasion he assisted at the disarming of them by the 81st Foot.

WE regret to learn that Surgeon-General Ringer, of Cheltenham, was knocked down by a motor-car on

Friday, sustaining a nasty cut on the forehead, as well as injury to the leg.

The King has been pleased to appoint Sir Frederick Treves, Bart, K.C.V.O., C.B., F.R.C.S., one of His Majesty's Honorary Serjeant Surgeons, to be a Serjeant Surgeon-in-Ordinary to his Majesty.

Lord Lister, like his other medical and surgical colleagues in attendance on the King during his recent critical illness, has undergone a good deal of anxiety. He has gone to Buxton to recuperate.

Among the Welshmen specially mentioned by Lord Kitchener in his latest dispatch is Civil-Surgeon R. F. Williams. He is a native of Talgarth, Breconshire, and was educated at Gonville and Caius College and the London Hospital.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

DEATH FROM SULPHONAL POISONING.

To the Editor of The Medical Press and Circular.

Sir,—I should like to call attention through your columns to a fatal case of sulphonal poisoning which recently came within my experience, and which provides a further illustration of the danger of the self-administration of narcotics and other dangerous drugs by persons without medical knowledge. Sulphonal has the reputation of being a safe and harmless soporific, and for this reason it is largely used by members of the public. It can, moreover, be obtained with the utmost facility, as its sale is not governed by the restrictions which are imposed in the case of many poisonous drugs. Yet it is really a delusion to suppose that sulphonal can be safely taken unless considerable caution is exercised. Its action is decidedly uncertain, often varying to a somewhat remarkable extent in the case of different individuals. Thus, while it is stated that as many as 1,400 grains have been taken without fatal results, as small a dose as 30 grains has been known to produce serious symptoms. It therefore seems clear that this is a drug which should be used only on the advice of, and in the quantities prescribed by, a medical man, and it appears to me that the question of imposing some restrictions on its sale to the public might well be seriously considered.

In the case of fatal sulphonal poisoning to which I have referred, I was summoned to attend a man somewhat over forty years old, who had been found in an unconscious condition in bed. The pathognomonic symptoms which I remarked on being called in at 6.15 a.m. were as follows:—Moist stridor, resembling the death rattles, (which I heard before entering the room), deep coma, pupils contracted and insensible, pulse strong (80 per minute), heart acting well (no murmurs), respiration very slow (about 8 to the minute); at 8 a.m. it dropped to 4 to the minute. The face was dusky, the lips and tongue quite black, and the front of the thorax was also cyanosed. He had passed no urine since 7 p.m. the previous evening, and the bladder seemed empty. I was informed by the wife that her husband was in the habit of taking sulphonal for insomnia, measuring it out roughly in his hand, and, as the symptoms appeared to me to be entirely consistent with poisoning due to an overdose of this drug, I treated my patient in accordance with this supposition. He, however, died in the course of about five hours, without recovering consciousness. In the meantime another medical man had been called in, and he was unable to fully concur in my diagnosis, as he considered the man's condition might be due to a cerebral lesion. In this view, however, I could not coincide, as not only did the symptoms point, in my judgment, to sulphonal poisoning, but there was also an absence of some of the usual indications of cerebral lesion. Thus the breathing was nasal, there were no signs of inflation of the lips, and the appearance of the face and the character of the pulse negatived apoplexy. Under the circumstances, a post-mortem was naturally held, and the results made it fairly certain that sulphonal poisoning was the cause of death. The theory that a cerebral lesion had taken place was negatived by the fact that the brain and membranes were intact, although severely congested. The lungs and viscera were also much congested, and the hands were firmly flexed, the thumbs being turned inwards. Although death had taken place within thirty hours, there were already marked post-mortem changes, such as extensive perforation and ulcerations of the stomach. It may also be mentioned that, on the jugular vein being severed, a considerable quantity of gas bubbled up, and that a number of blebs, caused by gas, were found on the surface of the liver. The bladder contained about one ounce of urine of a pale straw colour, which gave a slight deposit on boiling with acetic acid, but none with picric acid. This case thus supports Garrod's opinion (*Journ. of Path. and Bact.*, 1892, Vol. I., ch. 2) that hæmatoporphyrin is not always produced by sulphonal poisoning.

It will be seen from what has been said that, not only is sulphonal a very dangerous drug in unskilled hands, but also that the symptoms produced by an overdose are sufficiently obscure to allow of the possibility of serious error as to the cause of death. For both these reasons, it seems to me desirable that all that is possible should be done to discourage the public from dosing themselves with sulphonal under the delusion that they are employing a drug of a comparatively innocuous nature.

I may, perhaps, add that the severe congestion which was discovered at the post-mortem, suggested to my mind, that bleeding might possibly be a desirable form of treatment in cases of sulphonal poisoning.

I am, Sir, yours truly,
James Hamilton.

60, Sydney Street, Chelsea, July 24th, 1902.

APPENDICITIS OR LOCAL PERITONITIS WITH OBSTRUCTION.

To the Editor of The Medical Press and Circular.

Sir,—The marvellous feats of surgery recently may well excite wonder. It should be of interest to remark that the symptoms which present themselves to the practitioner are the same whether the obstruction and peritonitis are due to intussusception, torsion, infarction, constriction by band of lymph, adhesion of opposing or adjacent parts with intestine, to tumour or to abscess, blocking the channel of the intestine. The history and the signs serving to differentiate, there will be in all cases pain at navel and in right groin, obstruction of the bowels, vomiting, meteorism, high temperature, and then collapse. If the condition be due to tumour or abscess, the history and appearance will indicate the cause. The writer in 1871, with Surgeon-Major Nolan, in the case of a Sepoy at Hyderabad, after trying the usual remedies to remove the inaction of the bowels and to abate the peritonitis, tapped the intestine with great relief to the patient, and afterwards on opening the abdomen, found that there was no exudation or inflammation from the puncture, and concluded that if an abdominal section had been done ere gangrene of the gut, the patient might have a chance. The cause was torsion with adhesion and constriction by bands of lymph. The writer advocated abdominal section as soon as medical treatment failed and before mortification and collapse would have set in. The writer brought abdominal section as a remedy for obstruction and peritonitis before the meeting of the British Medical Association in Dublin over a dozen years ago, and was fully endorsed by the late Mr. Lawson Tait, of Birmingham, but the writer insisted that tapping should be done early, especially if there were a history of abscess or circumscribed dropsy—watery tumour or otherwise—that if delay were made until gangrene of intestine pressed upon had set, there would be no alternative except an artificial anus with a physical and physiological history important and adverse. Local peritonitis may be cured by fomentations and mercury with opium, and leeches should not be despised, but if suppuration has set in the abscess should be tapped at once with trocar and cannula, through which a disinfectant or bactericide could be applied to the sac or location of the pus.

I am, Sir, yours truly,
JOHN ROCHE, M.D.
(Retired Ind. Med. Serv.)

Kingstown, July 26th, 1902.

DR. MINCHIN'S TREATMENT OF PHTHISIS WITH GARLIC.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Having sent a number of phthisical cases to Dr. Minchin at Kells Hospital for treatment, and seeing the wonderful effects which followed, I give a brief history of two cases:—

1. E. K., æt. 17. Hereditary tendency; had pleurisy two years ago; for past eighteen months cough; evening temperature, 101°; perspired very much during night. On examination, dulness over both apices; bronchial breathing; râles. By microscope, tubercle bacilli numerous. Patient was rapidly losing ground under hygienic treatment combined with the ordinary medicinal (creosote, ol. morr. and urea). After being eight weeks under Dr. Minchin, the effects were astonishing, cough and night sweats disappeared; evening temperature normal; sputum showed no tubercle and patient gained 14 lbs. in weight.

2. J. S., æt. 26. No hereditary tendencies; complained of pain in chest; cough and night sweats; evening temperature 100°; sputum showed tubercle bacilli. Same treatment followed as in Case 1 without satisfactory result. After being five weeks under the garlic treatment with Dr. Minchin, the pain in chest, cough and night sweats disappeared; temperature normal, and patient has resumed his occupation.

The cases above enumerated and many others, have convinced me that the results obtained by garlic treatment justify all Dr. Minchin claims for it.

I am, Sir, yours truly,
JOHN BRANGAN, L R.C.P., L.R.C.S., ED,
Medical Officer, Kilsteer.

Kells, July 19th, 1902.

INSANITY AND CRIME.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Agreeing with much of your recent article, may I remark that I do not think the question of moral *responsibility* is the most important in the case? A man may have enough mental capacity to know that he is doing wrong, and yet there may be no sufficient reason for treating him as a criminal. It is not every wrongful act that is a crime. We have ceased to treat adultery as a crime. Has it ceased to be wrongful? The true object of punishment is (or at least ought to be) not to give every man what he deserves, but to protect the public. Now, so far as the individual is concerned, the public is as well protected by locking him up in a prison or an asylum as by hanging him. If it is better to hang him the reason is that this punishment has a greater deterrent effect on other people who are meditating murder. But has the hanging of weak-minded or "cracked" people the deterrent effect upon others? Men and women of ordinary intellect would know that if they committed murder they would have no chance of "getting off" on this plea; while weak-minded, excitable, eccentric persons who are verging on insanity or idiocy are not likely to be deterred by any example of carrying out the extreme penalty on persons like themselves. The ends of punishment would therefore, I think, be equally met by locking these persons up in some asylum, at least until it could be asserted with considerable confidence that no danger to the public would be involved in a release. There should, I think, be special prisons, or, rather, asylums, for their reception, and a medical certificate of lunacy should not be required for admission.

I am, Sir, yours truly,
M.A.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

THE REBUILDING OF THE ROYAL INFIRMARY.

THERE has been so much published in medical and other journals during the last twelve years about the rebuilding of the Manchester Royal Infirmary that all persons not directly interested have become thoroughly tired of the subject. The matter is, however, one of great importance both to the sick poor of Manchester and district and also to the medical school, whose work is mainly conducted in the infirmary and the Owens College. The present building is an ancient structure situated in the centre of the town in an open space which belongs to the institution, and measures nearly five acres. There are not quite three hundred beds for patients, and the accommodation for nurses, servants, and officials, who number considerably over one hundred, is by no means satisfactory. There is, of course, a very large out-patient department, which is worked in premises far from roomy. All are agreed as to the need for a new and enlarged building, but difficulty is experienced in determining where to put it. The College is about a mile from the infirmary, and half a mile from the College a good site is offered to the institution *free of cost*. Ordinary people think that this site should be used for a new building, as it would be near the College, in purer air than that found in the centre of the town, near enough to the main road for convenience and far enough from it to ensure comparative quiet. For accidents, emergencies, and the out-patient department provision would be made on the old site. Either the present buildings could be retained for this purpose, or the land could be sold, a corner of it being reserved for the erection of a building for accidents and out-patients. A strong party, however, is in favour of rebuilding on the old site, and the board of management has again submitted to the trustees plans for this purpose. At the meeting of trustees, however, a large majority threw out the scheme, so that there is still a chance that the institution may ultimately be well worked in two buildings, one in town, the other a little distance out and near the College.

THE BRITISH MEDICAL ASSOCIATION IN MANCHESTER.

THE annual "picnic" of the British Medical Association is being held in Manchester during the present week. It is no less than a quarter of a century since the last annual meeting was held in Cottonopolis; the Association met in Manchester for the third time in 1877, and an attendance of over 700 was recorded, the scientific work being carried on in six sections. The present meeting promises to be a record one in point of numbers. There are seventeen sections, and great pains have been taken to secure success. Mr. Walter Whitehead, as President, will have ample opportunities for displaying his characteristic tact and *bonhommie* in guiding the Association through its "transition" from ancient government to modern management. The meetings are being held in the noble buildings of the Owens College, the general meetings assembling in Mr. Waterhouse's elegant creation, the Whitworth Hall. An attractive programme has been arranged.

As we write many of our foreign and Colonial visitors have already arrived, bringing with them apparatus specimens, and, it is said, even patients to show to us. Our thanks are due to them for the care and trouble they are expending in thus contributing to the success of the occasion. The meetings for business are not attracting much attention. The reform of the Association may be far advanced by the end of the week, but few of the members will be aware of it. Many object to the alterations in the constitution, but they know and care little about the Association as apart from the journal. They will probably forget even to send in their resignations, although quite a number have at one time or another expressed their intention of doing so should the B.M.A. come to resemble a trades' union too closely.

On Monday evening the annual Museum and Exhibition was officially opened by the Lord Mayor. A Cathedral service was held on Tuesday morning, the sermon being preached by Bishop Thornton. At the same time a Roman Catholic service was held. Mr. Whitehead gave his Presidential address on Tuesday evening, after which a *soiree* was held in the Owens College.

The work of the sections commences this morning (Wednesday). Excellent accommodation is provided by the well-equipped theatres of the Owens College, but the widely separated centres make "rapid transfer" no easy task. The seventeen sections find employment for 108 "officials." Special discussions have been arranged for in most of the sections. In Medicine, dilatation of the stomach and the differential diagnosis of functional and organic paralysis are to receive consideration. A special feature will be the demonstrations of clinical apparatus and methods of research.

In Surgery, the treatment of inoperable cancer and tuberculosis, disease of the testis, vesiculæ seminales, prostate and bladder will receive attention.

In the Obstetrical and Gynæcological section discussion will centre on the modern indications for Cæsarean section and the operative treatment of prolapsus uteri.

Public Medicine presents such attractive matters as vaccination, "return cases" of scarlet fever, the prevention of tuberculosis, the relation of poverty to disease, and the arsenical poisoning.

In the section of Psychological Medicine, syphilis as a cause of insanity will afford material for much discussion.

In the department for Physiology and Anatomy new views are expected regarding the development of the human genito-urinary organs.

The pathology of nerve degeneration will be discussed in the Pathological section.

The value of physical exercises in diseases of the respiratory tract offers subject for tempting discussion in the section dealing with Diseases of Children.

Much clash of arms will be heard in the field of ethics over such matters as contract practice, medical education and organisation, and hospital reform.

The important section devoted to Tropical Diseases, will deal with beri-beri, dysentery and yellow fever.

And in most of the sections numerous papers are down for a hearing.

It would add much to the interest and value of the work of the Association if a summary or abstract of every address and paper could be made available for every member, as is now the custom with many congresses.

Entertainments and Excursions.

The hospitality of the North is proverbial. Manchester is determined to present a very definite demonstration of the necessity for retaining this view. Among so much that is attractive choice is difficult. To-night (Wednesday) after Sir Thomas Barlow's address in medicine, an open-air reception and fête is to be held in Whitworth Park. It is to be hoped that "Manchester weather" will be conspicuous by its absence on this occasion.

On Thursday the annual dinner will be held, and a ladies' reception and variety entertainment takes place at the Prince's Theatre.

On Friday the Lord Mayor holds a reception and conversazione in the Town Hall, after which a ball is arranged for in Platt Hall Park.

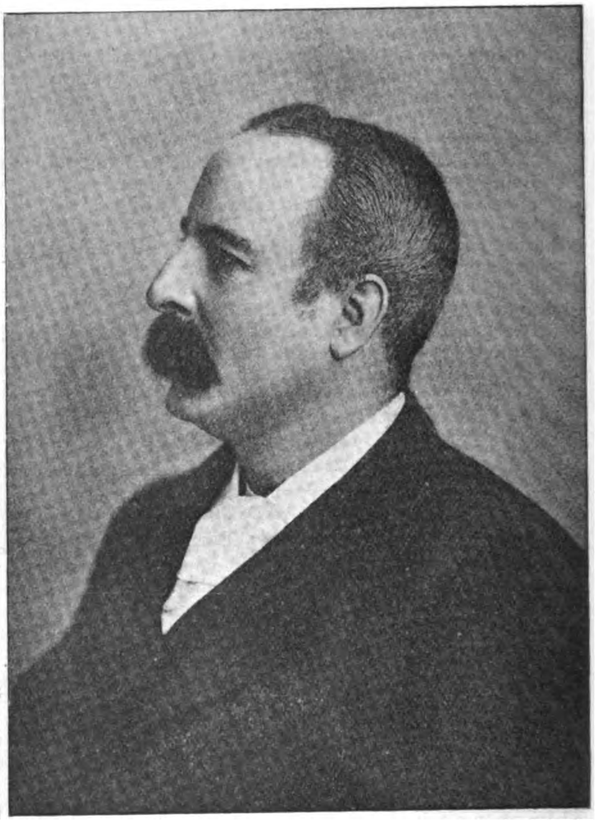
Every afternoon garden parties are being held. A very attractive series of excursions have been planned for Saturday. Various institutions in Manchester and Salford and the district will be open to visitors during the week.

An excellent "Handbook and Guide to Manchester" has been prepared under the direction of Mr. J. Howson Ray, giving very full descriptions of almost every feature of the district and phase of life likely to interest visitors.

The annual medical temperance breakfast is to be held at the High School for Girls on Thursday, July 31st, at 8 a.m. Sir Victor Horsley, F.R.S., will occupy the chair, and Sir Thomas Barlow, Bart., hopes to be present. Professor Sims Woodhead and others will take part.

The Dean of the Medical School of the Owens College, Professor A. H. Young, is prevented from attending the meeting by illness.

A number of American medical men are expected to be present and take part in the meetings, including Professor Osler and Professor T. M. Rotch.



The President of the British Medical Association.

The Manchester meeting of the British Medical Association is fortunate in being presided over by one who, in addition to local fame, has earned world-wide distinction. Mr. Walter Whitehead is essentially a Manchester man. He received his professional training in the old Royal School of Medicine in Manchester and qualified in 1864. He has occupied important posts in connection with many of the local hospitals, and is now Consulting Surgeon to the Royal Infirmary, the Manchester and Salford Hospital for Diseases of the Skin, the Lock Hospital, the Cancer Pavilion, and the Victoria Dental Hospital. Until recently Mr. Whitehead held the Chair of Clinical Surgery at the Owens College, and was examiner in the Victoria University. Mr. Whitehead has for long taken an active part in all matters concerning the welfare of the profession, and has acted as president of several important societies. The new President is also interested in Army and Navy work, and is honorary colonel of the Manchester Volunteer Medical Staff Corps. To medical literature he has made many notable contributions. In operative surgery Mr. Whitehead has been an able pioneer; it is hardly necessary to remind our readers of his work on excision of the tongue, and his very satisfactory method for effectually dealing with hæmorrhoids.

It is not for us to speak of Mr. Whitehead's ability as a public man, or charm in private life, but it may be said that Mr. Whitehead has a true Englishman's enthusiasm for sport, and is a keen yachtsman.

We heartily congratulate Mr. Walter Whitehead on the honour of being President of the British Medical Association, and trust his year of office will be marked by the blessings of peace and prosperity.

Literature.

CRAIG ON MALARIAL FEVERS. (a)

The author himself tells us that his purpose in the production of this work has been "to describe minutely certain fevers as yet too little understood by the mass of the medical profession, and which are of the greatest interest, both from a scientific and a practical point of view." The materials from which this very instructive volume has been prepared were very largely derived from personal observations and investigations made in the United States military hospitals. In their collection and arrangement he has been employed for nearly three years. How very much called-for this new departure in clinical and pathological observation really was, is impressed upon us by the first item of the information which he gives us regarding the previously existing state of knowledge in the most responsible quarters. He tells us that where his first work in this connection was carried out, at Chickamauga Park, "hundreds of cases of typhoid fever, pure and simple, were diagnosed as remittent malarial fever and treated as such, this being due very largely to the belief that because this camp was located in the south, it must necessarily become infected by malaria. As a matter of fact, there was but very little malarial fever present among the troops at Chickamauga Park, as has been amply shown by Vaughan, Dock, Reed, Shakespeare, and other investigators. The colossal mistake of diagnosing hundreds of cases of typhoid fever as malaria was really responsible for the terrible epidemic which actually compelled the evacuation of the Park as a camping site."

Dr. Craig divides malarial fevers into three classes: tertian, quartan, and estivo-autumnal; "each caused by its own distinct blood parasite, and each presenting distinct and more or less characteristic symptoms." He points out that as the tropics are approached, we meet less and less frequently with the benign tertian and quartan types of fever; their place being represented by the more severe and resistant estivo-autumnal infections, which "include also the terrible, pernicious malarial fever and the so-called black-water fever." The types of these fevers present so many and so variable features as to give rise to a good deal of complication—and even confusion—in the descriptions of the various authorities; "but all depend for etiology upon the presence in the blood of those forms of malarial plasmodia known as the estivo autumnal parasites or plasmodia of Laveran. We may say then that estivo-autumnal or remittent malarial fevers are fevers caused by the presence in the blood of definite blood-parasites, and characterised clinically by paroxysms of fever of regular or irregular duration, followed by regular or irregular intermissions or remissions."

The types of malarial fever are indeed among those which are the most clearly described by ancient and by mediæval medical writers. It was in 1712 that Torti distinguished them from other types of fever by their yielding to quinine, and it is since the date of his investigations that they became universally known as "malarial." Our author, we are very much pleased to observe, points out that the quinine test is not always a trustworthy one—especially in cases of estivo-autumnal fevers, "and should never be used for diagnostic purposes if a microscopic examination of the blood can be obtained."

The suggestion of a parasitic origin of the disease dates somewhat further back than the structural foundation of bacteriological pathology itself. Mitchell, in 1849, in his work on "The Cryptogamous Origin of Malarious and Epidemic Fevers," advanced the theory that the disease was really produced by the presence of spores which are indigenous in marshy districts; and the parasite, whose specific causal relationship to the phenomena of malaria has been fully established by Laveran, would appear to have been seen by Meckel in 1847, and by Virchow in 1848.

The volume now before us contains an excellently written account of the malarial parasites and their connection with the morbid phenomena to which their presence gives rise in the human body. A large proportion of the author's work is new; so that his opinions and views on some headings of his subject-matter will, of course, require further corroborative testimony before final acceptance. But his opinions, and his judgments of the opinions of his predecessors in this tangled forest of research, are always given clearly and without prejudice. As a specimen of his judicial adjustment of the scientific balance, we may offer the following; it relates to the various explanations which have been offered of the pyrexia of the malarial paroxysms since the discovery of the parasites:—"To Bacelli, however, we owe the most reasonable theory of the rise of temperature in malaria, and the one which is to-day accepted by most authorities. He suggested that during segmentation and the entrance of the young parasites into the blood, certain toxic products were liberated, which produced the fever. These toxic products he considered to be chemical products of unknown nature, formed during the development of the parasites within the red blood corpuscles and liberated during sporulation. This theory has been accepted by Marchiafava, Bignami, Mannaberg, Golgi, Thayer, and others. I believe that this theory explains most fully the rise of temperature in malarial fevers, and, reasoning from analogy, that it is without doubt correct. From our knowledge of other infectious diseases it is impossible to believe otherwise than that the fever of malaria is due to the liberation of toxic products in the blood during the segmentation of the parasites." He follows up the confirmatory considerations which further favour the acceptance of this theory to a distance to which we cannot, of course, follow him in the space afforded by our necessary limits. But we will say, in this connection, that we feel satisfied that his reasoning is as nearly perfect as it can be made in the present imperfect state of our data. We will only express the further hope that Dr. Craig will not discontinue his investigations in this hitherto obscurely mapped and measured domain of clinical pathology till he has thrown his searchlight into all its dark places.

We must notice, before concluding, that the author has not considered the subject of hæmoglobinuric fever. His own explanation of the omission is: "As the etiology of hæmoglobinuric fever is still somewhat in doubt, and as there are many excellent treatises upon it, I have thought it best to ignore it entirely." We commend Dr. Craig's discrimination. He took up the items of research which afforded him a definite starting point; and he has pursued his investigations with honour and enlightenment to himself, and with a full share of the latter to his professional brethren throughout the world. And we will close this notice by recommending to all medical men the perusal of his volume, and requesting the author to go on with the good work in which he has been so successful during his three years of probation.

(a) "The Estivo-Autumnal (Remittent) Malarial Fevers." By Charles F. Craig, M.D., Pathologist and Bacteriologist to the Army General Hospital. Illustrated by Two Coloured Plates and Twenty-one Clinical Charts. Imperial 8vo. Pp. viii. and 221. London: Bailliere, Tindall and Cox. 1901. Price 10s. 6d.

MERCIER ON INSANITY. (*a*)

As an introduction to the study of mental diseases the medical student will find in this admirable little book a very clear and lucid statement of the elements of insanity. Among other good points it presents new features in the classification of diseases of the mind, features which help in a very real way to overcome the difficulties of classification, so long a stumbling-block, especially to the student of medicine and to the busy general practitioner. Starting with the dictum "that there are not insanities but insanity only," Dr. Mercier logically regards the sub-division into forms of insanity and varieties of insanity, as meeting all the requirements of classification. By this broad distinction he simplifies the study of mental diseases, and in the pages of this volume presents to the student all the fundamentals of an elementary examination into diseases of the mind. This attempt to treat the various forms and varieties of insanity as types, brings the study of mental diseases more into line with the recognised study of bodily disease, a form of insanity corresponding with what is called in ordinary modern phraseology a symptom, a variety of insanity corresponding with what is called a disease, which may exhibit different symptoms at different times, or at the same time. One of the most interesting chapters is that in which the author deals with the causes of insanity; he is, however, too sarcastic when he regards toxins "as a very comforting word, which enables us to believe that we know far more about the causation of insanity than we did when we ignorantly called them poisons." The toxin theory, which is engaging so much attention at present as a causation of insanity, deserves in our opinion much more consideration. A complete index would have enhanced the usefulness of the book.

PUBLIC HEALTH AND HOUSING. (*b*)

LONDON and other large cities are so rapidly increasing as human centres that the problem of housing in relation to personal and public health has to be faced under new and but little known, and at present ill-defined, conditions. Dr. Sykes has, therefore, done well in presenting the profession with the substance of his valuable Milroy Lectures in so complete and convenient a form, which should be studied with profit by all interested in the matter of public health. To architects and all concerned in the erection and control of buildings for habitation the work will prove of the greatest service. In style and presentation it is so clear and lucid that even the ordinary layman may well find matter for thought and practical assistance in its pages.

Dr. Sykes devotes his attention mainly to conditions met with in the metropolis. Here the growth and pressure of population is necessarily altering the mode of living. The exclusiveness of the house of former days is giving way to a closer association of habitations. Mansions are now often shared by families; flats are springing up on all sides; boarding-houses and residential clubs are increasing in number; hotel life is becoming fashionable existing houses are being more and more sub-divided into tenements; flats of a small kind are becoming numerous; poor men's hotels or cubicle lodging houses are popular; and family lodging houses or boarding houses are coming to the front. The housing question, therefore, becomes the dominant factor in the maintenance of the health and vigour of the people. As the people become more and more town bred the necessity for ensuring conditions which will maintain the stamina, energy, and health of the population is seen to be of paramount importance. Dr. Sykes seeks first to ascertain the effects of such conditions of habitation as density of population, kind of dwellings, air supply and the like on the health of the people. He then passes to a discussion of the problems of construction and misconstruction. The various forms of street and house arrangement are described, and the classes of domestic buildings and dwellings, and their arrangement made clear by excellent diagrams.

In constructing dwellings for working-class families it is shown that if the rooms are too few there will be overcrowding, while if too many they will be sub-let. "The least danger lies in building for medium-sized families, the number of dwelling-rooms not being less than two and limited to four on the score of expense, remembering that there are practically three *sexes* to provide for, the married, the boys and the girls."

The chapter devoted to the consideration of domestic and sanitary conveniences is of much value, and well indicates their importance in regard to health. Perhaps the most attractive portion of the volume is that devoted to the usage and mis-usage of dwellings. Here are considered such matters as arise from pressure of population and overcrowding, tenement houses and tenement dwellings, and the registration of tenement houses.

A very useful section is devoted to a comparison of life on "floors" with that in "flats." Here Dr. Sykes very wisely shows that "with the increase in the size of dwelling-houses and the increase in the sub-division of houses into separate dwellings the urgency of legislation on the lines of the dwelling as the unit becomes greater and greater, and no approach to any satisfactory handling of the housing question, at least in the Metropolis, will ever be reached until this unit is adopted as a fresh starting basis."

Dr. Sykes is to be congratulated on having accomplished a difficult task with such success as merits not only the commendation of all his fellow medical officers of health but the approval of every medical man, and the thanks of each thoughtful member of the public.

HEALTH OFFICER'S POCKET-BOOK. (*a*)

A COMPARATIVELY long period of time—nearly ten years—has elapsed since the first edition of this book appeared, during which sanitary science has, we hope, made rapid progress. For this reason the task of bringing the text up to the standard of recent knowledge can have been no very light one, and we must confess the author has, on the whole, satisfactorily accomplished it.

The general arrangement of the book does not, however, strike us as being a peculiarly convenient one, too much tendency, consistent with ease of reference, being shown to deal with different parts of the same subject under separate sections. For instance, one part of sewage disposal appears under the heading of "Sanitary Memoranda," another under that of "Sanitary Practice." The same remark applies to water and water supplies, and while speaking of this subject we would draw attention to a recommendation the author makes, and which we cannot look on as otherwise than a grievous error. On page 109, under the head of "Constant and Intermittent Service," we read, "In very poor quarters public hydrants would be preferable," *i.e.*, to house taps on rising main. The modern tendency, and rightly so, is to give the poorer classes a supply of water in their own houses adequate for all purposes, and we can hardly believe that the author intentionally advocates a system which renders personal and household cleanliness a matter not only of great difficulty but almost an impossibility for them to attain. Ample supply of pure and efficient methods of removal of waste water, are surely two objects of the highest importance to all classes, and we may add, the poorer the class the greater the necessity for them. Again, on page 99, the author states that the necessary consequence of the construction of costly sewerage works in small towns is to foul the river and rob the land of its due, and we protest against any such tendency. Neither contention when examined will, we think, be found wholly accurate. It is now several years since Mr. Dibdin first observed the interesting fact that minnows were able to live and thrive at the outfall from his experimental contact beds at Barking. Other experts have

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(*a*) "A Text-book of Insanity." By Charles Mercier, F.R.C.S., &c. London: Swan, Sonnenschein, and Co., Ltd. 1902.

(*b*) "The Influence of the Dwelling upon Health in Relation to the Changing Style of Habitation. Milroy Lectures, 1901." By John F. J. Sykes, M.D., D Sc., Medical Officer of Health, St. Pancras. Pp. 216. London: P. S. King and Son. 1901.

(*a*) "The Health Officer's Pocket-Book." By Edward F. Willoughby, M.D., D.P.H. Second Edition, revised and enlarged. Pages xxii. and 400. Index xxiv. London: Crosby Lockwood and Son. 1902.

since noted this and further proofs of the high state of purity which can be attained in a sewage effluent. We have ourselves seen effluents kept for months without undergoing any secondary decomposition. River pollution is, therefore, not a necessary consequence of sewerage works, but points to some fault either in the initial scheme or in its subsequent working. For his other contention there is perhaps more to be said, although the ultimate effluent from some of the modern methods of sewage treatment, containing as it does a large amount of nitrogen in the form of nitrates, must have considerable value as a manurial agent when allowed to irrigate over land before final discharge into a river.

A large part of the work—nearly one half—is devoted to sanitary law, a collation of corresponding sections of the Public Health Act, 1875, and of London Act, 1891, being made which should prove useful. Perhaps those parts of the book which please us most are the first three sections of Part I. These contain a mass of useful information and formulæ of the very kind which is most difficult, to many persons at all events, to remember, and which is here set out concisely and accurately, justifying to a great extent the title of the work as a "Health Officer's Pocket Book."

INFECTION IN PUBLIC VEHICLES. (*a*)

The impression left on us by Dr. Greenwood's pamphlet is the urgent need for fresh legislation, without which we fail to see how the evils mentioned by him can be overcome. We should be more than glad to see an appeal made to the electorate by one of the great political parties, based on the "omnia sanitas" cry of Mr. Disraeli in the seventies, from which such important reforms resulted. From his official position as medical officer of health for Crewe, Dr. Greenwood has an almost unique opportunity of forwarding his crusade against the almost universally existing insanitary condition of railway carriages, and we feel no doubt whatever but that his opinion will favourably influence the management of the most powerful railway organisation in this kingdom. The crusade against tuberculosis is as yet in its infancy, and Dr. Greenwood has done good work by placing on record, in language so concise and simple as to be easily understood by the man in the street, the result both of his own experience and that of other workers in the same field. The difficulties of the problem are not by any means insuperable and the aim in view should be capable of being accomplished without trenching on that supposed personal liberty upon which we are perhaps apt to lay a little too much stress. It is no infringement of liberty to prevent a tuberculous person from becoming a source of danger to the community by spitting in railway carriages than it is to detain a small-pox patient in an isolation hospital. As Dr. Greenwood says, legislation and education are the most important factors in carrying on this war against tuberculosis, in both of which essentials we are at present far behind some other countries.

The pamphlet before us might with advantage be read and acted on by all.

SMOKE PREVENTION. (*b*)

The opinion of an expert on a matter of public importance is always of value, and certainly no fault can be found with Mr. Nicholson's work on the score of lack of experience and knowledge of the subject with which he deals. From a perusal of the book it is evident that it is the result both of a thorough acquaintance with the evils of the smoke nuisance and of a careful study of the best means available at present to prevent such. The author perhaps makes rather too sweeping a statement on page 36 with regard to the amount of CO_2 found in air, when he asserts "that all the carbonic acid made by the furnaces of the greatest manufacturing centres has failed to make any addition which chemical analysis can detect to the natural proportion" (viz., ·4 per 1,000 volumes, not 4 as he gives the figures) "in which that gas exists as an element of the atmosphere." This figure does not correspond with the amount found by Angus Smith and other observers in some of the large cities, as for example in the case of Glasgow, where the average is ·5 per 1,000. Again, on the next page we find the statement that about 150 cubic feet of air are required for the combustion of 1 lb. of coal. For practical purposes, we think this is put at much too low a figure and that more usually, at least once and a half this quantity, will be found necessary. These comparatively minor faults do not however, detract much from the general merit of the book, which might with advantage be placed in the hands of all persons having control of furnaces to whom we can commend it. The true solution of the smoke nuisance is perhaps yet to be discovered, and may we think, be found in the general employment of electric power generated from a central station situated in some position, remote from habitations and possibly with advantage controlled by the municipality.

Apart from a somewhat curious chronological error and one or two minor faults, the text is carefully and clearly written and the illustrations excellent, while the general production of the book leaves little to be desired.

DAVIES' HANDBOOK OF HYGIENE. (*a*)

We are pleased to see a second edition of this book, which is one of the best of its kind we are acquainted with, and which needs no apology for its existence. Lieutenant-Colonel Davies has succeeded in presenting in a most readable form the more valuable parts of the standard works of such authorities as Du Chaumont, Parkes, Wynter Blyth and other distinguished investigators in the field of sanitary science, while his own experiences, both in India and at Netley, only enhance the general merits of the work. The subject matter is clearly written and has been brought well up to date; and, although in the main all chapters in the book are worthy of perusal, those on "Food" and "Water" seem to us to be the most meritorious. It is, perhaps, to be regretted that the subject of Vital Statistics, considering its importance, has had such a limited space devoted to it, a fault which might with advantage be corrected in a future edition, even at the expense of a trifling increase in the size of the book. As we have said, we know no better work of its kind, and we can with confidence commend it to all as a handy book of reference, but more especially to those who have not convenient access to more pretentious volumes.

INDEX CATALOGUE. (*b*)

It is difficult to convey to the reader who has not seen and consulted one or more of the preceding volumes of the "Index Catalogue" the boon that the United States Government has conferred on the medical profession by the publication of this great Index, of which the present volume is the sixth of the second series. It includes in its 1,051 quarto pages 15,589 author-titles, representing 5,865 volumes and 14,296 pamphlets. It also contains 5,962 subject-titles of separate books and pamphlets, and 30,561 titles of articles in periodicals. The word "gonorrhœa" occupies 80 closely-printed columns, and "gout" 30 columns. On page 408 we find the notorious mountebank, James Graham, occupies nearly a column with his "Discoveries, Improvements, Methods of Treating Diseases, Temple of Health, and General Electric Apparatus." "Great Britain" occupies 92 columns, and the comparatively new specialty, "Gynæcology," 42 columns. The greatest number of references, however, occur under the word "Heart," which fill 246 columns. All that careful editing, sub-titles, the use of different types and beautifully

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(*a*) "The Prevention of Infection in Public Vehicles." By Alfred Greenwood, M.D., D.P.H., &c. Pp. 65. London: The Sanitary Publishing Company, Limited. 1902.

(*b*) "Practical Smoke Prevention." By William Nicholson. Pp. 151. London: The Sanitary Publishing Company, Limited. 1902.

(*a*) "A Handbook of Hygiene." By A. M. Davies, M R.C.S., D.P.H., &c. Pp. xii. and 624. Second Edition. London: Charles Griffin and Company, Limited. 1901.

(*b*) "Index Catalogue of the Surgeon-General's Office, United States Army, Authors and Subjects." Second Series, Vol. VI. G. Hernette. Washington: Government Printing Office. 1901.

clear and distinct type can do to facilitate reference has been done. The Surgeon-General's Library at Washington now contains 138,078 bound volumes, and 235,127 pamphlets.

The number of titles in the Index-Catalogue, so far as published, are:—Author-titles: Titles, 241,596; volumes, 115,739; pamphlets, 212,099. Subject-titles: Book-titles, 215,286; journal articles, 696,457.

All who have occasion to consult the Index must feel grateful for the generosity and thoughtfulness of the Great Republic that bestowed on the profession this great work, which facilitates the work of every medical scholar, is rich in suggestion to every thoughtful reader, and invaluable to all medical writers.

Laboratory Notes.

BRAND'S FEVER FOOD.

Prepared by Brand and Co., Mayfair.

This preparation has now become almost too well-known to require further commendation.

It is conveniently put up in small tins opened with a key, and its merits should ensure its being invariably included in the equipment of every traveller to tropical climates. A combination of essence of beef, egg and cream, its efficacy in sustaining the vital powers in fevers, and its property of easy assimilation make it the most valuable of foods in all malarial climates. In cases where the stomach rejects even milk and soda water, this food can be administered with success. If ice be obtainable the tin may be placed on it; if not the tin may be wrapped in a wet flannel and suspended in a draught. The jelly thus cooled is administered in a teaspoon without any admixture, and only those who have experienced its advantages can duly appreciate its value. We have analysed it on a previous occasion, and now find its composition to be practically the same. We would earnestly commend all medical officers and others proceeding to malarial districts to take a good supply of this preparation, which will afford them the means of greatly alleviating the suffering consequent on malaria in its severest forms and in all probability the satisfaction of knowing, as does the writer, that by its aid they have saved lives that might otherwise have been lost.

BRAND'S MEAT JUICE.

This meat juice, which is extracted from the best beef in the cold, must be clearly distinguished from the ordinary meat extract, to which it is greatly superior in composition and digestibility. We find on analysis that it contains nearly half its weight of assimilable nutrient materials, of which a large proportion is coagulable albumen that is not overcrowded with mineral matters, which are a great drawback in many meat preparations, containing as they do large quantities of salt.

The essence has a very agreeable flavour of fresh meat, and will keep good any length of time when unopened. It may be given either alone, when it is perfectly palatable, or mixed with aerated water. In the case of wasting diseases, fevers and the like, it does not produce nausea and is retained by the stomach (we are speaking from actual experience) when many other foods are instantly rejected.

FRIEDRICHSHALL MINERAL WATER.

We have analysed this well-known natural aperient water, and find its mineral contents coincide remarkably closely with the analysis made by the authorities at the Breslau Municipal Laboratory, who make a periodical examination of it.

This water contains a very valuable combination of sodium and magnesium salts in proportions which, while free from the nauseating taste possessed by some aperient waters, is effective and not disagreeable to take. It is exactly what is required by travellers proceeding to hot climates where a mild but effective aperient is a frequent necessity. It is most effective when taken on rising in the morning, and is free from the objection which is commonly experienced after the frequent use of drastic drugs like calomel, which have to be taken in increasing quantities to procure the desired effect. Of this water, on the contrary, the quantity needed is decreased by prolonged use.

Medical News.

Liverpool School of Tropical Medicine.

Major Ronald Ross, C.B., F.R.S., F.R.C.S., has been reappointed to the position of Walter Myers lecturer to the school.

Royal University of Ireland.

At the meeting of the Senate on July 24th the following were appointed as Extern Examiners for the autumn examinations, 1902:—In Surgery: Charles Stonham, F.R.C.S.E. Midwifery: Henry Jellett, M.D. Pathology: Alexander C. O'Sullivan, M.D. Opthalmology: William G. Syne, M.D. On the motion of Dr. Cox, seconded by Dr. M'Keown, Sir Christopher Nixon was unanimously reappointed as representative of the University on the General Medical Council for the ensuing five years.

The Census of Dublin.

The census returns for 1901 relating to the city or county borough of Dublin, which have just been published, are very interesting reading for all who take an interest in sanitation. In 1891 the population was 268,650, and in 1901 it had increased to 290 638, an increase of 8·21 per cent. The number of tenements of one room in the city was 21,747, comprising 3,278 cases in which the room had only one occupant; 13,320 where the room had 2, 3, or 4 occupants; 4,576 cases in which there were 5, 6, or 7 occupants; and 573 cases where the occupants exceeded 7 in number, including 47 cases of 10 persons, 13 of 11 persons, and 6 of 12 or more persons in the room. Of the whole population in 1891 24 per cent. could neither read nor write, and in 1901 the percentage of illiterates had fallen to 19·7. From these official returns we see in great part the reason of the abnormally high death-rate that is characteristic of Dublin. We find 36·6 per cent. of all the families of the city occupying one room; some 100,000 people in insanitary rooms, for the room-keepers' dwellings are insanitary to a disgraceful degree; but this condition need not be allowed to exist. There is no reason why the one room of the labourer should not be clean and healthy; and the making of it healthy and the keeping of it clean and healthy should be imposed as a duty on the owners of the tenement houses—houses that pay a very large percentage of profit to their owners. We would suggest that no house be allowed to be let in tenements until it is licensed by the sanitary authority of the city, and that, if from any cause the house is not kept in a sanitary condition, that the licence be revoked and the house shut. On each storey water-closets and lavatories should be erected, with, of course, an abundant water supply, and each lobby should be lit with gas or electricity. At present these dwellings are inhabited by the poorest and most decrepit of a large city, they become a very nidus of disease, and the owner of a few tenement houses accumulates a fortune in a short time at the expense of the health of the community. Being let to room-keepers, each house is valued at a small sum; the rates are consequently low, but the death-rate is abnormally high; the young, especially the infants, die like midges, choked with the polluted air they are compelled to breathe. It is a condition of life which should not be tolerated, one which the citizens should remedy. Men and women huddled together in these filthy tenement houses cannot enjoy good health; and it is difficult to see how they could live up to even a moderate standard of morality, seeing that their fellow-men are so indifferent to their sufferings.

Vital Statistics.

The deaths registered last week in seventy-six great towns of England and Wales corresponded to an annual rate of 14·5 per 1,000 of their aggregate population, which is estimated at 14,862,456 persons in the middle of this year. The highest annual death-rates per 1,000 living, as measured by last week's mortality, were:—from measles: 1·6 in Portsmouth and in West Bromwich, 1·8 in Gateshead, 2·0 in Stockton-on-Tees, 2·1 in Reading, 2·7 in Bury, 3·6 in Rhondda, and 4·3 in Rochdale; from scarlet fever: 1·8 in Gateshead; from diphtheria, 1·3 in Rhondda; from whooping-cough: 1·1 in Hull, 1·4 in Norwich and in Sunderland, 1·5 in Leyton, 1·7 in Hanley, 1·8 in Smethwick and in Barrow-in-Furness, 1·9 in Southampton, 2·2 in Portsmouth, and 2·4 in Grimsby; from "fever": 2·3 in Ipswich, and 3·0 in Merthyr Tydfil; and from diarrhœa: 1·6 in Wolverhampton, 1·7 in Hanley, in Bootle, and in Middlesbrough, 1·9 in Rotherham, and 2·4 in Plymouth. The 27 deaths from small-pox included 15 belonging to London, 8 to Swansea, 3 to Gateshead, and 1 to Bootle. In London 2,657 births and 1,236 deaths were registered. Allowing for increase of population, the births were 78 above, and the deaths 438 below the average numbers in the corresponding weeks of the last ten years.

A Bye-law against Spitting.

The Home Office has approved a bye-law passed by the Glamorgan County Council prohibiting spitting in public carriages, waiting-rooms, public halls, and places of public entertainment. It is held that the bye-law cannot properly be made to apply to churches, chapels, schools, and shops, nor does this matter very much since it is the exception for even inveterate expectorators to "indulge" their filthy proclivity in places of worship, while in schools the delinquents can be whipped out of the habit, and in shops they can be summarily expelled.

Mortality of Foreign Cities.

The death-rates in the principal foreign cities of the world from which official returns are received by the Registrar-General, were for the last week per 1,000 living: In Calcutta 30, Bombay 37, Madras 29, Paris 17, Brussels 14, Antwerp 12, Amsterdam 15, Copenhagen 15, Stockholm 16, Christiania 15, St. Petersburg 24, Moscow 35, Hamburg 14, Munich 22, Vienna 17, Prague 21, Buda-Pesth 17, Trieste 25, Rome —, Venice 16, Cairo 49, Alexandria 33, New York 19, Philadelphia 17, Boston 14.

London School of Dental Surgery.

The following is a list of the principal prize winners, Session 1901-1902: The Walker Scholarship, Mr. F. Butler. The Saunders Scholarship, Mr. E. C. Sprawson. Ashs' Prize, Mr. H. Perkins.

Class Prizes.—Dental Mechanics: 1st Prize, Mr. F. E. Sprawson; 2nd Prize, Mr. F. Butler.

Dental Metallurgy: 1st Prize, Mr. C. Peacock; 2nd Prize, Mr. F. Butler.

Practical Dental Surgery: 1st Prize, Mr. F. E. P. Huddart.

Dental Anatomy: 1st Prize, Mr. E. C. Sprawson; 2nd Prize, Mr. F. M. Müller.

Summer Session, 1902.—Dental Surgery: 1st Prize, Mr. E. C. Sprawson; 2nd Prize, Mr. H. Perkins.

Dental Histology: 1st Prize, Mr. H. Perkins; 2nd Prize, Mr. A. A. Smith.

Prize for best Note Book and set of Microscopic Slides (given by the Lecturer): Mr. E. C. Sprawson.

Pass Lists.

The Royal University of Ireland.

The following passed the first examination in medicine in the Faculty of Medicine:—Madeleine S. Baker, James Barrett, Daniel Boylan, Harry L. Bristow, Francis X. J. Callaghan, George F. Campbell, Holden Carson, John Dunlop, John L. Dunlop, Patrick J. Dwyer, John R. Elwood, Eleanor E. Finegan, Edward FitzGerald, William J. Gallagher, James J. A. Gannon, James Gaston, Patrick J. Grogan, Rowland Hill, James J. Hollywood, James Horgan, Robert F. Kennedy, Charles G. Knight, Samuel W. Kyle, Thomas J. McAllen, Samuel McCormac, Jerome B. Murphy, Patrick F. Murphy, Joseph Nunan, Joseph A. O'Halloran, Humphrey J. O'Sullivan, Charles B. Pearson, Percy B. Ridge, Charles H. G. Ross, James A. Shorten, Thomas Tobin, Ernest F. Watson, Henry N. Wrixon.

Honours in Botany (Second Class).—Charles G. Knight.

Honours in Zoology (Second Class).—Francis X. J. Callaghan, Madeleine S. Baker.

Honours in Experimental Physics (Second Class).—Rowland Hill, Francis X. J. Callaghan, Charles G. Knight.

Exhibitions (Second Class, £10 each).—Charles G. Knight, Francis X. J. Callaghan.

University of Aberdeen.

At the graduation ceremony on July 23rd, the following degrees were conferred:—

Degree of Doctor of Medicine (M.D.).—Norman Wm. Anderson, M.B., C.M., Strathmiglo, Fife; James Fletcher, M.B., C.M., Ham Green Hospital, Bristol; Albert Henderson, M.A., M.B., C.M., Aberdeen; Albert Hogg, M.A., M.B., C.M., Old Trafford, Manchester; Douglas Whimster Keiller Moody, M.B., C.M., Montrose; Alexander Robb, M.A., M.B., C.M., Paisley; Percy Austin Roden, M.B., C.M., Droitwich; Robert Maxwell Trotter, M.B., C.M., Newcastle-on-Tyne; George Alex. Troup, M.B., C.M., Stratford, London. The theses of Messrs. Fletcher, Robb, and Troup were awarded "commendation."

Degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch. B.), New Ordinances, with Second-class Honours.—Charles Todd Andrew, B.Sc., Hamilton; John C. G. Ledingham, M.A., B.Sc., Boyndie, Banff; John Hector Stephen, B.Sc., of Aberdeen.

William Leslie Beaton, Perth; James Davidson, Cruden-by-Ellon; William Fraser, B.Sc., Forres; William Sim Garden, Brankanentham, Portsoy; George Eric Hamilton, Aberdeen; Thomas Barrett Heggs, West Bromwich; Donald J. G. Johnston, Culduthel Mains, Inverness; William Louis A. Leslie, Stonehaven; Alexander James Macdiarmid, Aberdeen; George Shiach McDay, M.A., Dufftown; Malcolm Macleod, Aberdeen; Thomas Basil Mitchell, Hillside, Montrose; Alexander Lumsden Ritchie, Schoolhill, Turriff; George Officer Robertson, M.A., Wateridgemuir, Ellon; John Rose, M.A., Leanach, Inverness; Francis William Squair, New Deer; Henry Watson, Norwich; Andrew Stewart Wilson, Aberdeen.

John Murray Medal and Scholarship (awarded to the most distinguished graduate, M.B., of 1902).—Lewis Davie Cruickshank, M.B., Ch.B., Tarves, Aberdeenshire.

The Alexander Anderson Scholarship.—John Charles Grant Ledingham, M.A., B.Sc., Boyndie, Banff.

Diploma in Public Health.—Henry Fraser, M.D. Aberd., Aberdeen, with credit; Wilfred Ernest Lawson, M.B., Ch.B.Aberd., Aberdeen.

Conjoint Examinations in Ireland.

The following candidates have passed the Second and Third Professional Examinations of the Royal College of Physicians and Royal College of Surgeons:—

Second Professional (Old Rules).—F. W. Brunker, Jas. Harvey, R. McElvoy, T. J. Ryan.

Second Professional, Part II.—1. Honours: M. Kearn, Miss G. W. Clark. 2. All Subjects: M. Antony, E. A. Bernard, M. Campbell, W. J. Cowell, T. J. Golding, K. P. Mary, R. H. Smythe, A. J. Swanton, W. Tobin. 3. Completed Exam.: L. A. Hynes, Miss F. J. Lardner, J. M. Moriarty, S. H. Robinson.

Third Professional.—Honours—Order of Merit: C. W. Ewing, J. P. Lynch (R. W. Burkitt, K. F. Fleury, equal). Passed all Subjects: R. J. B. Buchanan, J. Casey, J. Clarke, D. C. V. Fitzgerald, P. J. Irwin, J. P. Ryan, L. P. Stokes, G. C. Tabuteau. Completed Exam.: R. I. Gordon, T. Keogh, J. Nicholl, J. O'Doherty, W. J. O'Doherty.

First Professional.—*Errata*—Mr. A. J. Faulkner's name should have appeared third in the list of Honours. Mr. S. C. Clark should have been Isaac Clarke.

Notices to Correspondents, Short Letters, &c.

☞ **Correspondents** requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

WEDDING CUSTOMS.

The time-honoured custom of throwing rice at weddings has oftentimes proved disastrous to the eyesight of either bride or bridegroom. Simple confetti, although not without manifest disadvantages, is certainly less dangerous than rice. We therefore think the Dean and Chapter of St. Saviour's Collegiate Church. Southwark, are at least short-sighted in issuing a notice which says, "Confetti is a foreign importation and a special abomination. . . . Never use it: it is cheap and nasty. Use the good old-fashioned rice instead." Were the anathemas of Mother Church ever dictated by hygienic considerations?

Clipstone (Dorset).—You had better have the child examined for adenoids, the effects of which are far-reaching and general. The operation can be quite safely performed under chloroform. Have the teeth attended to by a competent dentist if you wish to treat the child scientifically.

Oxoniensis.—The Building Act of 1894 provides for structural exits from roof in case of fire under certain conditions: (1) if used as a dwelling-house or a factory over 30 feet in height; (2) if the topmost floor be over 60 feet from the pavement. The Act as it stands is urgently in need of amendment, both in the interests of the public and of workpeople.

BAKEHOUSE LEGISLATION.

To the Editor of The Medical Press and Circular

Sir,—Your comments on my letter of the 16th come to the point at once. You say, "of course, under careful precautions to prevent contamination by outside microbes." That is the question at issue, but it is not at all clear that Drs. Waldo and Walsh did take proper precautions. The exposure of the bread only a few seconds to the non-sterilised air of the room they were working in was quite enough to allow of contamination, and the results of the experiments, carefully set forth on pages 37 and 40, seem to me rather to favour this view. Dr. Waldo refers to "futher experiments with artificially-infected dough." One would be glad to see the result of these experiments, as the essential thing is to establish a causal connection between the germs in the dough and the germs in the bread. But this has not been done at present.

I am, Sir, yours truly,
Editor "The Baker and Confectioner."

July 23rd, 1902.

[In carrying out scientific bacteriological investigations it is always assumed that careful precautions are taken to exclude contamination by outside organisms whether from the air or other sources. Such exclusion is necessary to the experiments, and is always taken for granted when gentlemen of scientific standing publish the results of bacteriological investigation. Were every step and every precaution detailed in the formal description of work of that kind the size of our medical journals and books, as well as of our special libraries, would have to be quadrupled.—Ed.].

Medicus (Bucks).—The season of summer diarrhœa is now at hand, although it may be late this season owing to the low temperature. The malady is commonly associated with the abundance of plums and other fruit. It seems more than likely, however, in the light of recent scientific researches that the disease is due to the growth of bacteria, fostered by certain conditions of environment connected with a high mean temperature of earth and air.

Appointments.

Baumann, E. P., M.D.Edin., M.R.C.S.Eng., Medical Registrar to the Hospital for Sick Children, Great Ormond Street, London.

Bayly, H. **Wansey**, M.R.C.S., L.R.C.P.Lond., House Physician to the West London Hospital.

Dyer, C. **Harold**, M.D., C.M.Aberd., Medical Officer of Health to the Cleckheaton Urban District Council.

Evans, **Arthur**, M.S., M.D.Lond., F.R.C.S.Eng., Surgeon to Out-patients with duties at the Branch Hospital in the Royal Albert Dock of the London School of Tropical Medicine.

Greene, **Arthur**, M.D., &c., Dublin, House Surgeon, Royal South London Ophthalmic Hospital, Southwark, S.E.

Hunter, **William**, M.D.Edin., F.R.C.P.Lond., Physician to the London Fever Hospital.

MacDowall, W. M., L.R.C.S., L.R.C.P.Lond., Locum Assistant Medical Officer to the Glamorgan County Asylum.

Paton, Leslie, B.A., M.B.Cantab., F.R.C.S., Assistant Ophthalmic Surgeon to St. Mary's Hospital, Paddington.

Rigby, **Hugh Mallinson**, M.B., M.S.Lond., F.R.C.S.Eng., Assistant Surgeon to the London Hospital.

Wallace, J., M.D.Aberd., Certifying Surgeon under the Factory Act for the Stonehaven District of Kincardineshire.

Woodhouse, C., M.D.Cantab., Certifying Surgeon under the Factory Act for the Urban Districts of Esher and the Dittons, East and West Molesey, and Walton-on-Thames.

Vacancies.

Ancoats Hospital, Manchester.—Resident House Surgeon. Salary £100 per annum, with board, residence, &c. Applications to Saml. Baron, Secretary.

City of London Hospital for Diseases of the Chest, Victoria Park, E.—Resident Medical Officer. Salary £100 per annum, with board, &c. Applications immediately to the Secretary.

Gravesend Hospital.—House Surgeon. Salary £90 per annum, with board and residence. Applications to F. H. Stevens, Hon. Sec., 146, Milton Road, Gravesend.

Haydock Lodge Asylum, Lancashire.—Assistant Medical Officer. Salary £175 a year, with furnished quarters, board, washing, &c. Applications to Dr. Street, Haydock Lodge, Newton-le-Willows, Lancs.

Holloway Sanatorium Hospital for the Insane, Virginia Water, Surrey.—Junior Assistant Medical Officer. Salary £150 per annum, with board, lodging, and attendance. Applications to Dr. W. D. Moore, Medical Superintendent.

Hospital for Sick Children, Newcastle-on-Tyne.—Male Resident Medical Officer. Salary £100, with board, lodging, and laundry. Applications to Edward MacNay, Secretary.

Liverpool Dispensaries.—Assistant Surgeon. Salary £100 per annum, with board and apartments. Applications to Sam. B. Leicester, Secretary, 56, Vauxhall Road, Liverpool.

Manchester Royal Eye Hospital.—Junior House Surgeon. Salary £90, with residence, board, and washing. Applications to the Chairman of the Board of Management.

Newport and Monmouthshire Hospital.—House Surgeon. Salary £100 per annum, with board and residence. Applications to the Secretary.

Nottingham General Dispensary.—Senior Resident Surgeon. Salary £200 per annum. Also one Assistant Resident Surgeon. Salary £160 per annum. Furnished apartments, attendance, light, and fuel are found for the above surgeons. Applications to Secretary, M. I. Preston, Journal Chambers, Nottingham.

Rotherham Hospital and Dispensary.—Senior House Surgeon. Salary £110 per annum. Applications to the Secretary, E. S. Baylis, 19, Moorgate Street, Rotherham.

Royal Lancaster Infirmary.—House Surgeon. Salary £100 per annum, with residence, board, attendance and washing. Applications to the Secretary.

Staffordshire General Infirmary, Stafford.—Assistant House Surgeon. Salary £80 per annum, with board, lodging, and washing. Applications to the House Surgeon.

St. Giles, Camberwell.—Assistant Medical Officer. Salary £120 per annum, with furnished apartments outside the Workhouse, and an allowance of £1 1s. weekly in lieu of board and washing. Applications to Charles S. Stevens, Clerk to the Guardians, Guardians Offices, 29, Peckham Road, S.E.

Sussex County Hospital, Brighton.—Second House Surgeon and Anæsthetist. Salary £80 per annum, with board and residence. Applications to the Secretary at the Hospital.

Torosay.—Medical Officer. Salary £100 per annum. Applications to John Livingston, Inspector of Poor, Auchnacraig, Isle of Mull.

University College Hospital.—Matron. Salary £125, with board, lodging, and washing. Applications to the Secretary, University College Hospital, Gower Street, London, W.C.

Births.

Adams Clark.—On July 18th, at 44, Beckenham Road, Penge, S.E., Josephine (Willoughby), the wife of Wm. Adams Clark, M.D., of a daughter.

Blomfield.—On July 24th, at Queen's Road, Peckham, the wife of Alfred Blomfield, M.R.C.S., L.R.C.P., of a daughter.

Finch.—On July 20th, at Purston, Yorks, the wife of W. Stanley Finch, L.R.C.P., M.R.C.S.Eng., of a daughter.

Hackney.—On July 23rd, at Hythe, Kent, the wife of Clifford Hackney, M.R.C.S., of a son.

Nightingale.—On July 23rd, at 26, Upper Phillimore Gardens, Kensington, W., the wife of Percy Athelstan Nightingale, M.D., of a son.

Rubra.—On July 23rd, at 39, Cecile Park, Crouch End, N., the wife of Henry H. Rubra, M.D., M.R.C.S., L.R.C.P., of a son.

Marriages.

Bowie—Martin.—On July 22nd, at St. John's Church, Weymouth, John Macaulay Bowie, M.D., M.R.C.P.Ed., second son of Robert Bowie, Edinburgh, to Jane Maude Julia Martin, eldest daughter of Mrs. J. D. Martin, Weymouth.

Lay—Ross.—On July 24th, at St. Mary Abbot's, Kensington, Charles Edward, only son of the late Joseph John Lay, M.D., Peasenhall, Suffolk, to Violet Barbara, third daughter of the late Hugh Ross, Esq., C.E., and of Mrs. Ross, of 3, Palace Gardens Terrace, Kensington, W.

Ward—Hill.—On July 22nd, at St. John's Church, Torquay, Thomas Hamilton Ward, M.D., of Paignton, to Emma Vivian, only daughter of H. Grylls Hill, Esq., of Hillesdon, Torquay.

Deaths.

Arnott.—On July 26th, at the Firs, Bath, Mary Ann, widow of Archibald Arnott, M.D., aged 91.

Bateman.—On July 21st, at Charles Street, St. James's, London, Frederick Augustus N. Bateman, M.D.Durh., aged 51 years.

Jones.—On July 27th, at 20, Addison Gardens, Kensington, Caroline, widow of Edward Jones, M.D., of Sydenham, aged 83.

Stedman.—On July 16th, at Redcliffe Square, S.W., John Buck Stedman, F.R.C.S., late of Godalming, aged 82 years.

The Medical Press and Circular.

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Original Communications.

THE STUDY OF THE NATURAL HISTORY OF DISEASE THE BASIS OF ALL ADVANCE IN ITS TREATMENT.(a)

By SIR THOMAS BARLOW, BART., K.C.V.O., M.D., F.R.C.P.

Physician to His Majesty's Household; Physician to University College Hospital.

TWENTY-FIVE years ago the British Medical Association met in this city, and the Address in Medicine was given by one who fitly represented the Manchester School, and whose name is illustrious among the leaders of our profession in the Victorian epoch. William Roberts had many remarkable gifts, but the combination in his mental equipment of infinite painstaking in homely detail and of philosophical insight and foresight gave alike to his public utterances and to his conversation a suggestiveness and charm which can never be forgotten.

In drawing attention to some recent notable advances in the healing art, I will ask your consideration and support for this thesis: The advances in the treatment of disease have been real and satisfactory in proportion as they have been harmonious with the complete knowledge of the natural history of disease. I do not say that good treatment owes its origin entirely to pathology—far from that; it has often antedated pathology—but in proportion as pathology has become complete it has rationalised good treatment and refined it, separating, so to speak, the ephemeral from the permanent, the accidental from the essential, as well as the harmful from the beneficent. Moreover in these last days in not a few instances the true pathology has laid down new therapeutic lines which have been justified by experience.

BACTERIOLOGY AND TREATMENT OF DIPHTHERIA.

Let me choose as my first illustration one of that group of acute specific diseases to which in his discourse Sir William Roberts gave his chief attention. I will ask you, as practical men, whether there is any disease within your knowledge in which bacteriological investigation has made so profound a change in our attitude as to the malady and its treatment as it has in diphtheria?

Recall, I pray you, the chaotic and bewildering state of doctrine on this disease only a dozen years ago. There were the endless, and not altogether academic, disputes as to the difference between croup and diphtheria; as to whether there was a true membranous croup which was different from laryngeal diphtheria; and as to the diagnostic differential signs of diphtheria which appeared to elude the most careful anatomical definition. Malignant diphtheria of the throat was easy to diagnose, but as to the nomenclature of mild cases simulating follicular tonsillitis and of the throat exudations complicating scarlet fever, an experienced man was the last person to dogmatise. It was only, at length, by studying cases in epidemic groups, and especially by noting the paralytic sequelæ, that we learned how widely we had to cast our net in order to include examples in which there had been no visible membrane at all though there might in some of them have been exudation in the post-nasal region, and, for a time, thin irritating discharge from the nostrils.

And how exceedingly diverse were our opinions as to its ætiology. We were never prepared to deny that exposure to cold was a cause, and after cold came drains. Drain poisoning, serious as it is in lowering vital resistance and preparing a suitable soil, has been often made to bear more than its fair share in the immediate causation of specific disease, and diphtheria was a notable case in point. Sir William Jenner, whose enlightened doubts were nearly as valuable as his absolute statements, would never admit that the direct relationship of diphtheria and drain emanations was proved. But the confident assurance of many people on this doubtful point was often exceedingly mischievous, for though it led to sanitary investigations and helped sometimes to bring about sanitary improvements, it also led to the quiet ignoring of other possible sources of the disease. There was a time, not many years ago, when cases of membranous croup were treated in children's hospitals in ordinary wards, and there were those who stoutly maintained that these cases were not contagious.

The further study of epidemics led to the conclusive proof that in some cases the disease was disseminated by milk. Then came the observation that epidemics were often followed by sporadic cases, or preceded for a time by mild and ambiguous sore throats. Country villages and isolated homes gave their quota as well as crowded streets.

By degrees, even in apparently sporadic cases, we came to attribute more and more importance to insidious personal contagion, and to see that the disease was maintained and transmitted by the moving to and fro of slight cases, especially in schools and places where children were closely aggregated. Increase of the disease seemed to correspond with the period when compulsory school attendance was enforced, and there grew up a strong presumption in favour of the tenacity of infective material associated with bedding and clothing.

When the bacillus of diphtheria had been isolated by Klebs and the inoculation of it in animals had been demonstrated by Loeffler to produce diphtheritic lesions, the first step had been taken in unravelling the skein. First, the polymorphism of the bacillus is very suggestive. The long and short varieties it has been shown may occur as pure cultures or side by side, or in successive cultures apparently one form may be replaced by the other. Though these varieties cannot as yet be correlated to different types of membrane, yet their discovery prepares us for considerable variation in gross naked-eye characters.

Secondly, the variation in virulence of the bacilli going down to an actual vanishing point with little morphological alteration has its transcript in clinical experience. When, in an ordinary case of faucial diphtheria the nose becomes affected and a thin ichorous discharge appears at the nostrils the gravity of the case is always increased. On the other hand there are cases of children attacked with thick fibrinous exudation obstructing the nostrils in which the Klebs-Loeffler bacillus has been identified and yet there is little constitutional disturbance and apparently very slight infectivity. There is a form of chronic diphtheritic ophthalmia with thick exudation which presents many similar features.

(a) Abstract of Address in Medicine at the Annual Meeting of the British Medical Association at Manchester, July-August, 1902.

Thirdly, the detection of the diphtheria bacillus in the secretions of the throat in cases at first clinically indistinguishable from follicular tonsillitis, gives the clue to the puzzling cases which the study of epidemic groups had brought home to us—namely, that paralytic sequelæ can occur when most careful observation has failed to identify any antecedent visible membrane. The persistence, sometimes for months, of the bacillus in the fauces of those who have passed through an attack of diphtheria when all membrane has long since disappeared, gives us the clue to the occasional prolonged infectiousness of those who have had this disease, and seems to enforce the need of special arrangements for diphtheria convalescents. It is the experience of those interested in day-school epidemics that a slight nasal discharge associated with imperfect resolution of the lymphatic glands are the clinical danger signals to be looked for, and which suggest the bacteriological investigation for continued sources of dissemination.

But we are further indebted to the bacteriologists for solving some of our clinical difficulties by demonstrating that not all false membranes are diphtherial. The streptococci, for example, seem capable of giving rise to pseudo-membranous deposit. The exudation occasionally present in early scarlatinal throats, which are extremely red and swollen, is not generally true diphtheria, and this harmonises with what is found clinically, that the exudation seldom spreads, and that paralysis does not supervene.

The manifest alteration after the use of antitoxin, even in a most unfavourable and ultimately fatal case, is convincing enough to an informed person that we have here a fundamental remedy of enormous potency.

When, within forty-eight hours, we see a young subject with malignant diphtheria, accompanied by secondary infections which are on the verge of setting up septicæmia, so far relieved after the use of the remedy that the glands are reduced in size, the cellular tumefaction of the neck is lessened, the membranous exudation is arrested, and begins to separate at the edges, the tongue is more moist, and the general state ameliorated, we know that something has been done to control the disease processes with which no previous treatment with which we were acquainted was in the least degree comparable.

Furthermore, in cases in which tracheotomy has to be performed, not only are the mortality statistics improved, but we see for ourselves that the membrane formation ceases to spread, and the tube, which has formidable disadvantages of its own, can be withdrawn much sooner, and the risks of ulceration and stenosis can be thereby lessened.

Since the introduction of the antitoxin, the urgency of local applications to the fauces has become lessened to a marked extent. We are told that antitoxin only neutralises the toxin, but does not destroy the bacilli themselves. A weak mercurial solution which attacks the bacilli, though it coagulates the albumen, and an alkaline solution which favours the solution of the membrane, seem to be all that are needed. By too much zeal in local applications, we interfere with the protective action of the phagocytes, and the old corrosive applications are entirely ruled out.

With continued experience the limitations of antitoxin are becoming more and more clearly understood. A careful man seeks the assistance of the bacteriologist in every doubtful case, but does not wait for his report, for he knows that the certainty of success depends on the remedy being introduced early, say within the first three days, and that the risks of its employment are insignificant. The existence of secondary infections makes him far more anxious, and he feels compelled to warn the friends on that account, but it does not prevent his applying the diphtheria antitoxin even in very grave cases. Experience does not seem to support the concurrent use of antistreptococcus serum.

TETANUS.

While the diphtheria antitoxin treatment is in every way the most satisfactory of all the serum methods, the other members of this group of therapeutic measures are full of suggestion, and it is worth while briefly to consider a few of them.

Thus, with regard to the tetanus antitoxin, although the experiments on immunisation of animals have not furnished us with a successful method of dealing with the severe and acute cases of human tetanus, yet some benefit has been gained in the chronic forms.

OTHER EXAMPLES OF SPECIFIC REMEDIES.

In the other examples of this kind of treatment we have to depend on very incomplete data. For example, in rabies we are still ignorant as to the micro-organism, which we are none the less convinced is the cause of the disease. But the knowledge that the poison is lodged in the cerebro-spinal tissues has led, in the hands of Pasteur and his pupils, to the most fruitful results. The working hypothesis that in the dried spinal cord of an animal that has died of rabies the micro-organisms are destroyed, but that the immunising substances remain active, seems to have been justified by experiments based upon it and by its applications.

There surely can be no doubt of the prophylactic value of Pasteur's methods so far as those who have been bitten by rabid animals are concerned, although no beneficial effects follow their employment in the developed disease. But when a complete analysis of the life history of the organism has been attained, we may fairly look for still greater results in the therapeutics of this disease.

Is it unreasonable to suggest the same thing with respect to the great triumph of English protective medicine, namely, vaccination? One of the best results of the recent Royal Commission was that it gave the *coup de grace* to the easy optimism of those of us who considered that there was finality in what had been already accomplished, and that nothing more was needed than to continue on the old lines.

But the most recent methods of preparation with the carefully-regulated glycerination, and the getting rid of so much of the secondary infection, for which we are indebted to Copeman, mark an enormous advance in the practical application of vaccination.

Who can doubt that there are still further triumphs in store for us when the organism has been discovered and its natural history has been completely worked out?

Of plague, cholera, and typhoid I will not speak, for the inoculation methods are still *sub judice*.

With respect to the employment of antistreptococcus serum we are met by the most various testimony. Some cases of erysipelas and puerperal fever, and some of those most desperate cases of acute septic mischief following on infections from necropsies, have been strikingly benefited by the use of injections of the serum. Some cases of infective endocarditis appear to have improved, but a great many others have shown no response whatever.

It would appear that although streptococcus is the organism common to many forms of septicæmia, and although morphologically no differences can be established, according to the lesion from which it is derived, that there must be many different strains, and that the serum of an animal that has been immunised from one strain will not necessarily prove beneficial to an animal subject of another strain. Meanwhile it would seem that in any case of formidable septicæmia, when there is substantial reason to doubt whether the patient can cope with it successfully, we are not justified in withholding the use of antistreptococcus serum, which should be recently prepared.

THE TREATMENT OF TUBERCULOSIS IN THE LIGHT OF MODERN DISCOVERIES.

Koch's great discovery of the tubercle bacillus in

1882 has been so far-reaching and comprehensive that the simplification which it has brought about in our knowledge and in the mode of grouping of a great body of facts seems almost incredible. The most important outcome was that it confirmed the doctrine that tubercle should be placed among the chronic infections and so helped us to realise, in some sense, the kind of enemy with which we had to deal.

The importance of the tuberculin injection as a test for the tuberculous lesions in cattle seems to be very great indeed, but the justifiability of the employment of this test in the human subject for the determination of a doubtful lesion is, I think, open to question, although it has been extensively employed without proof of harmful effect.

Let us now consider in detail what we have learned from recent sanatorium experience in our time. First, we have learned the value of hyperaëration and of establishing tolerance to cold and to exposure to variations of temperature. The value of hyperaëration is not summed up in its affording more effective oxygenation to the lungs, parts of which are *hors de combat*, though that counts for a great deal. The access of free air is also a natural and wholesome stimulus to the nervous system. It increases the appetite and lessens the languor and exhaustion of a chronic febrile disease which the still, warm air of the old sick-room did nothing to relieve. The getting rid of the liability to catarrhs of the upper passages by free exposure to pure, fresh air had been known to us apart from phthisis, if we had only had the sense to apply it, and the enormous difference between sitting in the open and sitting in a draught was an old story which we ought to have remembered. The daily exposure to free, cool air has also been shown to have a direct benefit in lessening pyrexia, diminishing sweating, and improving sleep. And can we exaggerate the value of the immeasurably greater intake of direct sunshine which this treatment ensures as compared with any ordinary mode of life?

With regard to the employment of exercise, the time when it is taken, and the exact amount of it, the sanatorium experience has shown us that the most important therapeutic indications depend on the careful record of temperature.

With regard to food, we find that the exaggerated fastidiousness which is so hard to deal with in phthisis is less of a difficulty under sanatorium treatment than under ordinary conditions; that the number of patients who are unable to assimilate milk is exceedingly small; and, finally, that the enforcement of large mixed meals, at any rate for a period, is on the whole justified by the results of chemical investigation and of the actual well-being of the patients.

It is also clear that to meet the full needs of the poor there ought to be some form of special hospital provision made for incurable and rapidly advancing cases of phthisis. These are certainly not suitable for the sanatorium, and it is unfair to frustrate the true work of the sanatorium by sending such patients thither.

On the other hand, with our present arrangements of general hospital and infirmary wards, the contiguity of cases of acute and curable disease with those of advanced phthisis in which there is copious expectoration is always an anxious matter, even when precautions are taken.

First as to the prevention of infection, voluntary notification has been established in Manchester and elsewhere, with very good advantage. There seems to be very little difficulty in securing disinfection of rooms after a fatal case has occurred in the abodes of the poor, and experience would seem to show that, with tact, notification of phthisis during life may be followed by sanitary inspection, and by such useful guidance as to ventilation, cleanliness, and disposal of sputum.

With regard to the relation of human tuberculosis to that of the lower animals, Koch's remarkable deliverance has no doubt led to much searching of heart, but we must possess our souls in patience and wait for the results of further and more exhaustive investigation.

Meanwhile, let us do all we can to prevent the relaxation of the hard-earned sanitary regulations which have been obtained for the protection of the community in respect to cattle. There can be no doubt of the wrong done by allowing milk to be supplied from a cow with a tuberculous udder; and the value of the tuberculin test for revealing this disease has been definitely proved. The instruction to our patients to scald their milk should be given universally, although we may condemn the prolonged and repeated sterilisations at high temperatures which have lately become fashionable.

But I must confess that for my own part I have not yet been convinced that the abdominal tuberculosis of young children is in any large amount the result of infection pure and simple from tuberculous milk. Human tuberculosis absolutely limited to the alimentary canal and to the mesenteric glands is not a very common disease. I believe that for young as well as old the entrance of tubercle is in far greater proportion by the respiratory tract, and that its resting place is in the bronchial glands and the lung alveoli, and that in a large number of cases the infection of the mesenteric glands is a secondary one or part of the general infection. Also the habit of swallowing the sputum, which is so constant in children, ought to be taken into account in the consideration of the production of intestinal and mesenteric tubercle. Three colleagues of mine at the Children's Hospital, Great Ormond Street, who had held the post of pathologist there, namely, Dr. Colman, Dr. Batten, and Dr. Still, have published the results of their investigations, and these all point in the same direction.

The carefully-recorded observations of Dr. Carr, Dr. Guthrie, and Dr. Northrupp likewise show the great preponderance of bronchial glands as the common site of tuberculous lesions in children.

The most important antecedent and predisposing conditions for tuberculosis among the children of the poor are measles and whooping-cough, and the close stuffy rooms in which they are treated and in which their convalescence takes place.

The response of children to open-air treatment is, if anything, more striking than that of adults, and I believe that it will be found that they are more tolerant of exposure to wind than adults are.

The Differentiation of Meningitis.

Bacteriology has done a great deal towards the elucidation of the somewhat confused groups of meningitis. Setting aside the septic cases which arise in connection with otitis and bone disease and injury, as well as those severally dependent upon syphilis and tubercle, there remain:

1. The epidemic cerebro-spinal fever, in which the characteristic organism is the diplococcus intracellularis.
2. The rapidly acute forms, often vertical, but sometimes cerebro-spinal, which are associated with pneumonia, empyema, and ulcerative endocarditis, in which the pneumococcus is the characteristic organism and—
3. The sporadic subacute form, especially found among young children, often limited to the posterior region of the base of the brain, but sometimes also spinal, which is usually unaccompanied by any visceral disease whatever. In this form Dr. Still has isolated a diplococcus, allied to that of the cerebro-spinal fever, but with some definite differences.

There is scarcely any group of diseases in which the resources of therapeutics have been so discouraging. It is true that in the first and third of these forms there have been a certain number of recoveries, and, although for my part I would not relinquish the use of mercury, yet it seems doubtful whether drugs have played any important part in the recovery of the successful cases. Although lumbar puncture and drainage from the cervico-occipital region have temporarily relieved pressure symptoms, they cannot as yet be strongly urged as curative measures.

May we not reasonably hope that serum therapeutics will one day find some tangible success in this group of intractable diseases?

The late Dr. Washbourn, whose premature loss we all lament, had succeeded in making an antipneumococcus serum, and it has also been prepared and used in Italy. But the results hitherto obtained, so far as pneumonia is concerned, are inconclusive. I am not aware that there is evidence as to its effect in the form of meningitis depending on the pneumococcus.

HOW ADVANCE MAY BE MADE IN THE FUTURE.

Hitherto we have stood on more or less solid bases of established fact, though there have been many gaps in our knowledge, but it would be interesting to forecast a few of the probable directions in which research in the forthcoming generation is pretty certain to add to the common stores.

With regard to nervous diseases it seems almost certain that some of the acute types will be brought still more into line with the specific fevers. Anterior poliomyelitis, for example, which occasionally affects two or three members of a family almost simultaneously, and which shows some striking relationships to the exanthemata, will almost certainly prove to be an acute infective disease.

The nervous sequelæ and complications of the exanthemata are a mine of clinical wealth and suggestion, for they point not only to disseminated foci of cerebral and spinal hyperæmia and extravasation, but also to later changes, at first insidious but sometimes far-reaching, dependent on the dissemination of the toxic products of bacillary growth.

The great group of peripheral neuritis, towards the elucidation of which we are pre-eminently indebted to the Manchester School (and notably so within the last year), is indeed a meeting-place for many ætiological factors, but it is especially suggestive as showing the parallel effects produced by toxins which are the outcome of bacillary activity, and by inorganic and organic material introduced by way of the alimentary tract, and perhaps by poisonous products elaborated in the body itself by faulty metabolism.

Can there be any reasonable doubt that we are on the eve of a fuller elucidation of cancer, and that when the history of the organism which we suspect to be behind it has been learned, then the fragmentary and isolated pieces of knowledge which have been painfully and slowly acquired during past generations will slip into their proper places like the blocks in the puzzle of a child? But if the history of previous discoveries in our science goes for anything, this, again, will be an instance of the convergence of work of experimental pathology, biology, and chemistry, and of clinical medicine and surgery in their widest connotations.

Gentlemen, I have finished my task. I have tried to drive home the thesis that the advances in the treatment of disease have been real and satisfactory in proportion as they have been harmonious with the complete knowledge of the natural history of disease. I have given various instances in support of this thesis, and others could be given. If we are agreed, what is our duty arising out of this conviction? Surely that we ought to do all that in us lies to maintain, to develop, and to defend experimental research in alliance with clinical work.

Our countrymen are wakening from their complacency, and beginning to realise that in our great industries it is imperative, if we would keep our place, that well-directed scientific research should be liberally and steadily maintained. And shall it be said that in the care for the life and health of the community, the noblest and most precious of all industries, we are to be left crippled and poverty-stricken by the absence of suitable equipment?

Let us fain hope that the day may come when to the other beneficent functions of this association there may be added some form of systematised, continuous, and widespread local organisation for the scientific study of the problems of disease.

THE sum of £27,377 has just been awarded to the authorities of the London Hospital for a strip of land required by the London School Board for the erection of a school. The original claim by the hospital was for £38,000.

CARCINOMA IN WOMEN:
CHIEFLY IN ITS CLINICAL ASPECTS. (a)

Eadem orationis virtus atque unguenti, nam et male affectos nos juvat, et bene habentes oblectat.—*Demophilus.*

By
WILLIAM JAPP SINCLAIR, M.D.,
Professor of Obstetrics in the Owens College, Manchester.

APOLOGY AND JUSTIFICATION.

IT is generally believed that carcinoma of the sexual organs of women is as cancer occurring in men, and to this extent, therefore, the subject is not one of obstetric medicine pure and simple. But malignant disease has a tendency to affect certain organs in women to an extent and with a relative frequency unknown in the other sex; and the clinical facts in the typical cases of cancer of the uterus make up a *tout ensemble*, an association of syndromata, a personality of the disease, that distinguish it from the malignant disease of any other organ.

If carcinoma of the uterus be the same disease as cancer in general, may not this individuality or personality of the malady make it the key to the situation? The frequency with which the disease occurs in a medical practice, the comparative similarity pervading the cases amidst individual differences, the facility with which operations can be performed and therapeutic agents employed, the possibility of careful clinical investigation and observation of cases in which the disease recurs, and of cases immune from recurrence, are all circumstances which attract attention to this special form of malignant disease, render it a comparatively easy subject for inductive reasoning, and therefore make of it perhaps the most promising field for clinical research.

PATHOLOGY AND CLINICAL GYNÆCOLOGY.

There is a general and a special aspect of the subject which we may examine in proportions suitable to the occasion: (1) The investigation of the ætiology and pathology of cancer in general; and (2) the consideration of cancer of the uterus in particular. The practical gynæcologist may ask: What have investigations and researches into the ætiology and pathology of cancer of the uterus done for clinical gynæcology? The answer must be guarded, at this stage at least. A late distinguished gynæcologist once said in his haste that a knowledge of anatomy was positively misleading with regard to the surgery of the pelvis. It can hardly be alleged that pathology has been misleading to the gynæcologist, for he has never trusted to its guidance. "Men are wiser than their creeds"; they hold pious opinions in religion which, fortunately, they never put into practice. They affect to entertain, because they have never questioned, certain theoretical tenets in medical science, but these beliefs do not in any way modify or injure their practice. If we could effectively pass in review the old pathology and the new, and estimate their practical results, we should, I am convinced, be greatly impressed with the need for clinical gynæcology saving itself by scientific clinical work.

THE NEW PATHOLOGY.

It would take us too far away and far too long a time from the clinical consideration of the subject to go into detail on the newer ætiology and pathology of cancer in general, and the disease as it affects the female sexual organs in particular. But it may be as well, for the sake of completeness, and on account of its bearings on the practice of to-day, to glance at the chief features of the more recent research and controversy.

Is the cause of malignant disease a vegetable parasite or blastomycete as suggested by Russell ten or twelve years ago, and worked out by San Felice and many others?

Are the "cancer bodies" animal parasites? a theory maintained by Gaylord, and supported by much persevering and ingenious observation and experiment.

Is it an infectious disease most nearly resembling tubercle and syphilis? or is the cause still entirely unknown or merely guessed at as possibly the result of local or general changes in the nervous system governing the growth, the nutrition, and involution of organs and tissues?

(a) Abstract of the Address in Obstetrics at the Annual Meeting of the British Medical Association at Manchester, July-August, 1902.

It would be impossible within my limits, and with the objects in view, to discuss all this in detail, but glance at the work of one or two individuals and inquire what relation their results have to the clinical observation and the treatment of disease.

Leopold of Dresden, after many years of observation and experiment, placed the results of his labours before the profession at the International Congress held at Paris in 1900, and he returned again to the subject at the Congress of German Gynæcologists held at Giessen last year. His conclusions amount to this: That blastomycetes may be the cause of malignant new growths in man; that they may convey the disease by inoculation from man to animals, producing exactly similar new growths which are fatal to the animals affected. Among his experiments Leopold mentions the implantation into a rat of tissue from carcinoma of the ovary. The animal died in sixty-one days from a tumour the size of a walnut, which was found to be an adeno-sarcoma.

It will thus be seen that Leopold, like some other experimenters, in order to prove his theories must give up the distinction between carcinoma and sarcoma. This may be right, and a step towards truth and simplicity, or it may have been accepted by the author under stress of circumstances like the poet succumbing to the inexorable demands of rhyme at the expense of the sense, or it may only imply, which is most probable of all and certainly true, that it is not always possible to distinguish between carcinoma and sarcoma by the aid of the microscope alone.

In referring to this subject in a recent discussion, Menge expressed the opinion that such experiments produce merely granulation tissue with giant-cells, and he further says: "If Leopold holds to his belief in the specific nature of his cancer-producers, he must admit the identity of carcinoma and sarcoma."

W. A. Freund's opinion of such experiments may be inferred from his oracular advice when concluding his appreciation of Leopold's work: "Wait and see." (*Abwarten!*)

With regard to the parasitic theory of cancer, some very confident statements as to progress in discovering the causation come to us from America. At the last meeting of the American Gynæcological Society, one of the speakers gave typical expression to our vague hopes and aspirations. In the course of a paper on Hysterectomy for Uterine Cancer, he said: "Are we not justified in the hope that the so-called parasitic theory of the origin of cancer may evolve something? The solution of the question depends upon the bacteriologist and pathologist. We can but look upon the subject with some seriousness when the great State of New York has considered it of sufficient importance to establish a pathological laboratory for the study of the ætiology of cancer. Dr. Gaylord, of that institution, has reported that he has found the protozoon." During the discussion which followed, Dr. Matthew D. Mann, Professor of Gynæcology in the University of Buffalo, said: "I know the profession is not ready yet to accept the evidence of what has been done in Buffalo, but, personally, I feel quite convinced that in the State Laboratory the cause of cancer has been discovered."

Cancer of the Uterus, not as a Growth but as a Disease.

We search, then, in vain through the recent manuals of gynæcology, and even of pathology and the records of pathological investigation, for any hint of progress in the evolution of an ætiology of malignant disease of the internal sexual organs of women. Of histology there is enough and to spare, but of pathology in the narrower sense there is but little to arrest attention, much less to satisfy; and there is absolutely nothing to indicate an advance from the position of a former generation of pathologists. The nomenclature is new—the thoughts and principles are old. There would, in fact, be a certain amount of truth in the allegation that the diligent pursuit of the histology of malignant growths and other tumours has distracted the attention, the activities, and the energy, to say nothing of the intellectual force, which might have led to a true pathology of cancer of the uterus by fixing the attention upon structure, growth, and extension in relation to clinical phenomena. We have heard too much of cancer as neoplasm, too little of it as a disease. If, now, we set aside all considerations of the ætiology and pathology of cancer of the uterus, and keep in mind only the clinical aspects of the disease, we see much ground for congratulation on the achievements of the last quarter of a century. The clinical work has been wholly surgical. What is not surgical is futile—it is hardly knowledge.

What has been Accomplished.

It is nearly thirty years since, as house surgeon to a gynæcologist of great local repute, I had every opportunity of observing the treatment of cancer of the uterus, a disease which when a student I had never once seen diagnosed by a clinical teacher. The routine method was to clear away some of the *débris* of tissue from the invaded portion of the cervix, and apply a certain liquid which had at the time a more general application in the treatment of certain diseases of the skin. The treatment was painful, and that was all. No patient was kept in the hospital to die, and I need hardly say that no one received appreciable benefit. Next came the period of bromum and other specifics equally futile.

A few years later I had the opportunity of witnessing the operations by the galvanic écraseur of the late Professor Carl Braum von Fernwald, in the Vienna General Hospital. He obtained a wonderful degree of success in arresting for years, and sometimes permanently, the progress of the disease by removing the vaginal portion of the uterus when that was the only part involved. Next, Schroeder of Berlin practised and advocated the supra-vaginal amputation of the cervix. The practice has been continued to the present time by some of Schroeder's pupils, notably by Hofmeier and Winter.

Next came the period of progress with the operation of total extirpation. Many hesitated to attempt it owing to the immediate danger. But the technique rapidly improved, and it soon became the generally-accepted operation, because it afforded the best grounds for hope of conferring prolonged benefit or definitely curing the patient. Whatever we may think of the remote results of our surgical work, no one who knows the history can deny that the reduction in the immediate mortality from this operation marks one of the greatest triumphs of modern surgery.

Vaginal hysterectomy, when the disease is confined to the uterus, is not now more dangerous than an ordinary ovariotomy. The mortality, which at one time was 30 per cent., has now sunk to 3 or 5 or 7 per cent., according to the extent of the disease and the concomitant complications or derangements of health.

In recent years there has been a wave of depression passing over the gynæcological world on account of the unfavourable remote results of vaginal hysterectomy for cancer, and the most optimistic will admit that there has not been much ground for satisfaction. At a recent congress of American gynæcologists one of the members said: "There are some men who claim for total extirpation of the uterus the happiest results. . . Other men have looked upon the matter with utter hopelessness. . . . I am sorry to say that I have brought myself among the latter class from bitter experience." This opinion is very far indeed from being held of that majority of operators who are not extremists towards either optimism or pessimism.

We may select examples from every country in Christendom, which now includes America, and the lessons taught by all are the same.

Winter reports from Berlin 308 operations, with a mortality of 5 per cent. Recurrence took place in nearly 70 within five years, and there were nearly 30 per cent. of permanent cures. Of the cases in which the operation could be effected in sound tissue the proportion of cures was 33 per cent. Winter remarks on the frequency of recurrence in the cicatrix.

As representatives of Italy we may quote Spinelli and Mangiagalli. The former reports 41 operations, with a primary mortality of 2·4 per cent., but the "cures" were only 8·9 per cent. Mangiagalli had 127 cases, with a mortality of 8·6. Only seventeen patients were free from recurrence after three years. In his cases recurrence was *always* in the cicatrix.

In this country Lewers traced the history of forty cases operated on radically per vaginam with a primary mortality of 7 per cent. There was freedom from recurrence in 27·5 per cent. from two to seven years. In eleven cases of cancer of the body five of the patients were well from four to seven years after operation.

These illustrations of work done might be multiplied to an indefinite extent, but enough has been set down to support the statement that there is ground for encouragement, not for depression, much less despair, in the history of vaginal hysterectomy for cancer.

To our resources that will enhance the value of surgical interference in the future there is, in my opinion, no more valuable contribution than the improvement in technique introduced by the late Professor Schuchardt of Stettin.

The most remarkable figures of all are those given by Schuchardt as the results of the paravaginal operation. The best results before were those of Leopold in Dresden, who, with an operability of 20·4 per cent., had 50 per cent. of conventional "cures." Schuchardt raised the operability to 61 per cent. and had conventional cures to the extent of 40 per cent. In easy cases he had the astonishing result of 80 per cent. of cures.

REACTION.

One of the results of the depression arising from the recognition of the unfavourable remote results of vaginal hysterectomy has been a rush, especially in Germany, to the extreme verge of the practical in dissecting out not only the internal sexual organs but the whole of the lymphatics and cellular tissue of the pelvis. This has been declared to be justified by the belief that better remote results would be obtained than by vaginal hysterectomy.

From a careful and laborious attempt to keep up with the record of proceedings, I have no hesitation in saying that a large portion of the extended radical abdominal hysterectomies for cancer are murderous vivisections, which nothing hitherto advanced in their support appears to palliate, much less to justify. Most of the cases recorded have been too far advanced for any operation, however radical.

There appears at the present time to be no visible limit to operations for cancer in the judgment of some of our contemporaries. The title of one very recent contribution to a gynæcological journal must suffice for calling attention to *Fortschritt* in the direction of vivisection: "Simultaneous occurrence of cancer of the uterus and of the stomach—abdominal total extirpation of the uterus, gastrectomy with gastrojejunostomy."

THE FUTURE OF TREATMENT AND THE AIMS OF CLINICAL RESEARCH.

Among the preliminary considerations which call for attention comes the question: Is cancer of the uterus on the increase? My own firm conviction for a long time has been that it is not, in spite of all allegations to the contrary.

If, as I firmly believe, cancer of the cervix is a different disease from cancer of the body, and is a morbus miseriæ like osteomalacia, leprosy, and pellagra, it is bound to decrease as the social condition, the physical well-being, the freedom from worries, and the consequent comparative happiness of the people improve.

OUR HOPES OF IMMEDIATE AMELIORATION REST, THEREFORE, ON SURGERY.

We must rely not on the extension of operative procedures into the brilliance of vivisections, but on the united efforts of all concerned to bring the cases under surgical treatment at the earliest possible stage.

We labour at present under considerable disabilities:

1. The patients are not so well trained and disciplined as German and other women in Continental Europe. They naturally hesitate when they think of going to a doctor to tell of their symptoms, and they neglect the most ominous symptoms with a light heart because they suffer no pain. The consequence is that as a rule our cancer patients consult the doctor when it is clearly too late to do any operation justifying the hope of cure, or even prolonged immunity; and many cases seek advice for the first time only when it is almost too late to palliate.

2. This is clearly the most important of the many diseases regarding which the interest of the general practitioner in the subject and his influence with his patients are our chief ground for hope of ameliorations. To him the patient first appeals, and consequently on him depends whether steps shall be taken promptly or otherwise to bring the best resources of medical science to bear on the individual case. If I might venture a criticism, my own experience would suggest that all are not sufficiently insistent on physical examination, even when there is *primâ facie* evidence that the cause of the symptoms is malignant disease.

3. Among the causes which lead to late diagnosis of malignant disease of the uterus—partly by leading the patients to present themselves late, and partly to the postponement of examination—is the prevalent superstition with regard to a "climateric hæmorrhage." I have no hesitation in saying with entire conviction that "climateric hæmorrhage" is, like the collective term "cancer," one of the inherited burdens which we drag along with us to our hindrance and grievous detriment. Apart from pathological conditions usually diagnosable, there is no such phenomenon in nature.

4. Another popular delusion which stands in the way of early diagnosis of cancer of the uterus is the belief that pain is an invariable symptom of cancer. When the sufferer from cancer begins to complain of pain, we all know now that the disease is too far advanced for radical treatment.

What has been implied in all that I have said I now wish to state explicitly for what it is worth. It is my firm conviction that the secret of cancer in general will be discovered, if ever, by the study of carcinoma of the uterus, and that the means will be exact clinical observation, followed perhaps, and corroborated by, experimental research.

The microtome and the cultivation tube and experimental implantation have had their day; they need not cease to be, but they should find their proper place in our system of research. We may get at the causes of malignant disease, as far as we understand the causes of things, by exact clinical observation; but the specific remedy or the system of therapeutics will come, in all probability, as a stroke of empiricism from an individual working for the sake of knowledge. It might be argued that the pathology and serum treatment of tuberculous disease and diphtheria are examples to the contrary, but there appears to be hardly any analogy between the genuinely infectious diseases and the phenomena of cancer.

Cancer is infectious to the individual already affected with cancer, but to no other. The phenomena of rapid recurrence in the cicatrix after operation, owing to contact of the fresh wound with cancerous matter, points to an early cancerous condition of the system, an entirely different matter from the late cancerous cachexia.

APPLICATION OF LOGICAL METHODS.

If we are ever to arrive at the causation of carcinoma of the uterus we must teach it by the rigid application of logical methods of induction to clinical work. We are already in possession of certain facts established clinically with regard to cancer of the body and cancer of the cervix, and the extent to which they are dissimilar. We might begin with carcinoma of the cervix. It is a diseased condition, with antecedents and characteristics almost entirely its own. Its characters fit it specially for clinical observation and the application of logical methods of induction.

"If two or more instances of a phenomenon under investigation have only one circumstance in common, that circumstance is the cause of the phenomenon." The application of this method of agreement would require very patient notetaking, according to a rubric containing every antecedent circumstance which has ever been suggested as the cause, or connected with the cause, of the disease. After a time it would be seen what was the invariable antecedent, if any, in every case. If there was no invariable antecedent of the phenomena of the disease over a considerable series of cases, then the rubric would have to be strengthened by new possible antecedents, while the obviously irrelevant could be abandoned. By the antecedent circumstances, I mean such facts as heredity, previous illnesses, especially contagious diseases, social circumstances, marriage, childbearing, puerperal ailments, menstruation, lactation, and an indefinite variety of others. One of the earliest results of this method would probably be the differentiation of the varieties of malignant disease of the uterus, just as clinical work alone established the differences between the fevers in the past. We would learn which clinical varieties most readily recurred, where the recurrences commenced, and how the last state of the operation case after recurrence compared with the case in which the disease had been allowed to run its course unaffected by treatment. Facts would be proved, fables disproved. Conclusions formed would become opinions, not individual impressions.

Conclusion.

Running through all I have said and implied, in some apparent digressions has been an effort to attract attention (as far as anything I may say can do so) to the dignity and the effectiveness of exact scientific clinical methods of observation. To do so it seemed necessary to contrast the futility of much of the labours of the past in order to establish the ætiology and true pathology of cancer. All honest and enlightened human effort should be welcomed; I depreciate none. But chiefly is my hope fixed on the fact that in such research as I have been suggesting every member of the medical profession engaged in general practice could co-operate in genuinely scientific work with those whose daily occupation was of a special character.

I shall not parody the language of the great German authority upon whom I have so largely drawn, and speak of a Promised Land: I shall content myself with saying that my earnest hope and desire is this: that some of our younger men with more energy, better opportunity, starting on a higher level of knowledge, will professedly take up this great enterprise and see whether by calm, industrious, and enlightened clinical observation, alone or collectively, they can find out for mankind the cause and the remedy for this mysterious and dreadful malady.

DILATATION OF THE STOMACH.

By T. CLIFFORD ALLBUTT, M.D.,
F.R.C.P., F.R.S.,

Regius Professor of Physic in the University of Cambridge,
Physician to Addenbrooke's Hospital, &c.

In opening a discussion on this subject at the Manchester meeting of the British Medical Association, Dr. Allbutt confined his remarks chiefly to the atonic or non-obstructive dilatations of the stomach, as the obstructive dilatations were, comparatively speaking, well understood. Atony and atonic dilatation had not received the attention they deserved, atonic dilatation, indeed, being neglected by some physicians, and by a few even denied. Acute dilatation of the stomach he was disposed to attribute to compression of the gut by the distended viscus itself about the junction of the duodenum and jejunum. "The stomach," he said, "is supported more firmly at the cardiac than at the pyloric end; and in any case its mean position is more vertical than is generally supposed, especially when empty. In estimating atonic dilatation, especially in its lesser degrees, the area of the cardiac moiety is therefore to be carefully observed. The stomach may drop as a whole into the mid-abdomen or hypogastrium, and this independently of more general enteroptosis. Gastroptosis is not necessarily attended with dilatation. In this case the stomach assumes a wallet shape, the cardiac and pyloric orifices approaching each other; or if the pyloric end slip more than the cardiac the position of the organ is more vertical and to the left. In this latter case the more muscular pyloric moiety is apt to become dilated by the gravitation of retained contents. The relation of gastritis to dilatation of the stomach is little understood. It would seem that excess of hydrochloric acid is not necessarily, or perhaps usually, in its earlier stages a consequence of gastritis; it may rather be the cause of it. During life the presence or extent of gastritis is often assumed on very slender grounds, and even our post-mortem knowledge of it leaves much to be desired. Relaxation of the stomach, due primarily to muscular failure, and therefore appearing first in the pouch and fundus, may depend upon toxic causes or mere atony. Such gastric distension, advancing to dilatation, not uncommonly retards convalescence from such diseases as typhoid fever and rheumatic fever. When the condition follows slow digestion with fermentation, anæmia, or mere inanition, the muscular failure is primary. That spasm of the pylorus may cause dilatation of the stomach, as, for example, in ulcer, hyperchlorhydria, or lumpy contents of the stomach, seems not improbable. Such morbid action is consistent with what we know of other sphincters; but atonic dilatations rarely seem big enough to be due to a permanent spasmodic contraction of the pylorus; nor is the muscular coat, as we should expect, hypertrophied. In atonic dilatation peristalsis does not become visible. That the nervous system may be concerned in paresis of the stomach seems likely enough; not only that continuously depressing causes may act in this way, but that sudden and grave mental shock may be quickly followed by considerable atonic dilatation of the organ. The effect of alcohol, in so far as it may be a cause of dilatation, may act directly as a poison to the muscular fibre or indirectly by extension of inflammation outwards. Atonic dilatation of the stomach is no rare consequence of exhaustion by excessive athletic exertion or mental stress, especially in young people of delicate constitution. Dilatation of the stomach is far from being rare in little children and infants; in them it often comes on acutely, but if the condition be understood it is readily relieved by emetic or the tube. The symptoms of atonic dilatation, to an observer not forewarned, are often indefinite, if not misleading. There may be little or no loss of appetite or dyspepsia; in an early stage of the disorder food often relieves a sense of sinking. Vertigo, sleeplessness, heaviness, lassitude and fatigue, and mental depression may divert attention to the nervous system. Flatulence, indeed, is rarely absent, but the tongue may be clean, vomiting slight or absent, the bowels constipated or the stools occasionally lienteric. The heart is apt to flutter or to intermit, and the abdominal aorta to throb. In extremer cases the pulse falls in volume and pressure, the hands become chilly, the nails livid, and the face thin, drawn, and sallow. By physical signs we may determine the size and position of the stomach. In thin persons gastroptosis is not difficult to ascertain (in well-nourished persons it never seems to occur), and it is for the most part curable by rest, massage, and better nutrition. When, as is usual, the dilated stomach occupies (approximately) its normal position detection of the disorder by physical signs will, generally speaking, be easy. Under ordinary circumstances peristalsis is never visible, as in obstructive dilatation, and the signs of distension are chiefly notable to the left of the middle line and under the lower ribs; the ballooned stomach is apt to push up the diaphragm and to encroach upon the thorax. The area of resonance may rise to the fifth or fourth rib and may extend to the posterior axillary line. Such a stomach often accompanies diseases of the heart and plays a large part in the patient's distress. Physical examination must be made at various periods of digestion and when the stomach ought to be empty. In health the stomach after a meal should contract upon its contents, when an area of dulness rather than of resonance will become apparent. Even in acute indigestion there is a considerable grip of these contents, a grip often attended with stomach-ache, but in atony, with or without static dilatation, an area of resonance at the cardiac end will be found almost immediately after a meal; even four or five hours after a meal the vault remains high and, behaving capriciously under gaseous influences, at no time does it contract in any regular periods. Thus the pyloric moiety, in its turn unable to withstand the gravitation of its contents, increases from its comparatively small transverse diameter until the stomach as a whole may assume a uniform, thick, sausage shape, the upper outline of which may include the nipple and the lower the navel. Strangulation by sharp flexure of the pyloro-duodenal portion may occur in particular cases but such cases are not so common as we suppose. Dropped kidney is often rather in association with atonic dilatation or gastroptosis than a cause of them, though Sir William Bennett and Mr. Bidwell have incidentally relieved dilatation by fixation of a right kidney. Dilated colon may be mistaken for a dilated stomach, and in rare cases the error may be unavoidable; but in the vast majority of instances by discriminating percussion, even without intubation, these two organs may be distinguished. The stomach may no doubt be wholly concealed by the colon, but ordinarily some narrow area of stomach resonance can be obtained, when a difference of percussion-note, either in pitch or clang, can be made out. In difficult cases syphonage or insufflation may help us: Von Ziemssen recommended in such cases alternate inflation of colon and stomach. The tuning-fork, auscults-percussion, and coin-tapping, in my experience, add little or nothing to what careful percussion can reveal. In a healthy stomach no squelchy sounds should be obtainable; they are usually obtainable in atonic dilatation, but rarely amount to the succussion splash of obstructive dilatation. If before breakfast squelching can be obtained after the drinking of a tumbler or two of water we have to deal with a flabby and extended stomach. The use of the tube is of cardinal importance for diagnosis if not for treatment, but among private patients in England this method is resented, and makes but little way. The normal fasting stomach contains at least from 20 to 30 cubic centimetres of residual fluid, and may hold even 100, but quantities above 100 cubic centimetres are morbid. In the normal state this residuum should not contain any particles recognisable as remnants of food: seeds, grit, or fibre in vomit or stool should be carefully noted, and the date when they were swallowed ascertained. The larger the residuum and the more obvious the relics of food the worse the case. A considerable admixture of mucus may indicate the presence of gastritis. In atonic dilatation sarcinæ and torulæ are not usually found, lactic acid but rarely and in small quantity. The quantity of water accepted by the stomach gives us little information; individual tolerance is very variable, but in atonic dilatation the return of it is very feeble, or perhaps is obtained only by expression or syphonage. Illumination of the stomach from within is of little service. From radiography we may hope for some more information. Chemical tests for the delay of ingesta, such as salol or potassium iodide, may corroborate but cannot dictate a diagnosis. The treatment of atonic dilatation must largely depend upon the causation of the individual cases; particular symptoms will often indicate the means of their own palliation. Vertigo, often very severe, and lassitude after meals often depend upon distension of the stomach, and may be quickly relieved by careful regulation of diet and restriction of fluid at meals to the lowest quantity. In sleepless cases, besides these measures, hydrotherapy expertly carried out is often the more useful, as it takes the patient away from work and care into a bracing climate. In heart disease, after much disappointment in the use of specific remedies, the cure or relief of an atonic dilatation of the stomach may be attended with remarkably good effects. Such patients, under the guise of a light diet, will consume quantities of farinaceous puddings, often well sugared, which disengage gases readily. Thirty years ago I traced a state of anæmia and debility apt to appear in colliers and others engaged in similar work to dilatation of the stomach, a dilatation due to want of home meals and to the consumption of large quantities of liquid with heavy food rich in carbohydrates. Mastication must be carefully provided for and papain I have found to be a very useful aid in digestion. The abuse of corsets and belts must not be overlooked. In these cases rest not only after, but also before, meals is of importance. In some emaciated persons the full Weir-Mitchell system may be necessary, especially in gastroptosis; in all a long rest and change of air are of the first importance, nor should such persons on returning to their ordinary occupations expose themselves again to excessive stresses and other causes of exhaustion."

Therapeutic Notes.

By GEORGE FOY, M.D., F.R.C.S.
Surgeon to the Drumcondra Hospital, Dublin.

ETHYL BROMIDE.

Under its new name of bromethane, ethyl bromide is being used as a general anæsthetic for minor operations. It is a colourless liquid of a peculiar ethereal odour and taste; it was first prepared by Serullas in 1827, by gradually adding twelve parts of bromine to forty parts of alcohol and one part of phosphorus; it is now prepared by the interaction of ethyl hydro-oxide with phosphorus bromide.

The physiological action of the anæsthetic was discovered by the late Mr. Thomas Nunnelly, of Leeds, whose name is familiar to toxicologists for his experiments with strychnine in 1851.

Mr. Nunnelly introduced ethyl bromide in the Leeds Infirmary as a general anæsthetic. The great expense of its production caused him to discontinue its use, but in 1865 he brought its claims before the British Medical Association. Chisholm, of Baltimore, used it 3,000 times without one death. He found it useful in minor surgery, but if its use was protracted beyond a few minutes it produced nausea, vomiting, and heaviness. Marion Sims considered it unsuitable if the kidneys were at all diseased. Gilles (*Berlin Klin Woch.*, February, 1892) records its successful use in many thousands of cases, and quite recently Dr. A. Brown Kelly, of Glasgow, has used it successfully in minor operations on the nose and throat.

The unpleasant effects of the anæsthetic are, according to Naub, of Berne, due to impurities. An interesting account of the chemical characters of the preparation has recently been published in the *Pharmaceutical Journal* by Mr. Gilmour, who recommends the formula of the French "Codex" for the preparation of the chemical, and gives some good rules for its preservation and testing.

That it acts well as a general anæsthetic I have shown ("Anæsthetics: Ancient and Modern"), but that it is not without lethal properties is proven by Professor Pancoast's case. It may for minor operative work displace nitrous oxide, to which general surgeons never took kindly; but although it is more agreeable to inhale and requires no elaborate apparatus, it is not as safe and is almost as evanescent in its effects.

RHEUMATINE.

Under the fancy name rheumatine there is introduced a new remedy for rheumatism. It is an ester, ether quinci of acid salicylic, of which the formula is C_6H_4 OH, CO. O C_{20} H_{23} N_2 O. Since 1820, when Pelletier and Caventon discovered quinine, or rather since its introduction into practice by M. Maillot in 1832, attempts have been made to get rid of its bitter taste and its unpleasant effect of cinchonism, without lessening its valuable therapeutic properties. One of the most successful of these was the ester ethyl carbonic of quini of von Noorden; produced in 1896, and many other combinations followed, of which acetyl quinine, succinyl quinine, phosphoryl quinine, chlorcarbonyl quinine, and diquini carbonate; these were followed by combinations of quinine and acids of the aromatic series, and we got anisyl quinine, cinnamyl quinine, and ether benzylcarbonite of quinine. The latest outcome of this chemical industry is rheumatine or saloquinine, a neutral base-forming acid, almost tasteless, and said not to cause any unpleasant head noises. It occurs in asicular crystals, which are insoluble in water, but freely soluble in ether and alcohol. It is claimed for the drug that it has a specific value in the treatment of infectious diseases and as a febrifuge; it is even more efficacious in the treatment of nervous pains and neuralgias than quinine. In sciatica Overlach gives 30-grain doses on the patient's going to bed and repeats the dose during the night if the pain continues. In typhoid fever its effects in 30-grain doses night and morning are said to be very marked. On all rheumatic affections it exerts an analgesic and a pyretic action, particularly in the acute forms. Overlach gives it in 15-grain doses three times a day for four days, and then discontinues its use for twenty-four hours in acute rheumatism, and is much pleased with the results obtained. The drug has, however, some drawbacks; it makes a bulky powder, of which a large dose must be taken, and it is insoluble in water. Patients do not like large doses of bulky powders, neither do they care to swallow a thick fluid holding powder in suspension; to many, particularly women patients, capsules are not easily swallowed. These objections may be looked on as trivial, but nevertheless they are real and will interfere with the general use of rheumatine.

Clinical Records.

JESSOP HOSPITAL FOR WOMEN, SHEFFIELD.

Semi-Solid Multilocular Cystic Ovary.—Operation.—Recovery.

Under the Care of John W. Martin, M.D.,

Honorary Medical Officer, Jessop Hospital for Women, Sheffield.

Mary Ann S——, æt. 39, married, three children, the last, thirteen years of age. Admitted to the Jessop Hospital, May 7th, 1901, with a large abdominal tumour.

History.—Had an abortion twelve years before. Never pregnant since. She was quite regular down to August 1901, commencing on the third, and lasting for five days. In September, same year, had a slight show as if commencing, but it passed off; nothing afterwards. From puberty she had suffered from dysmenorrhœa, and the periods were always profuse, lasting seven or eight days; clots were passed.

In September she first noticed a small swelling in the hypogastrium, which steadily increased in size. At the time of admission the tumour was about the size of a six months' pregnancy. There was milk in the breasts, but this could always be expressed since the last pregnancy. Per vaginam the cervix felt decidedly softened. No movements could be felt, nor could fœtal heart-sounds be heard. She was seen in consultation by the other members of the staff. Although pregnancy was thought improbable, its possibility was considered, and a further period of waiting was advised. She was kept under observation until October 7th, when she was again admitted into the hospital. It was now thirteen months since her last period. The tumour had increased to the size of an eight months' pregnancy. She suffered very considerable discomfort and pain, shortness of breath when moving about, and was unable to discharge her household duties. The bowels were difficult to move, and there was dysuria. The sound was introduced and passed a little over two and a-half inches. Abdominal section was decided upon, and I operated upon October 18th, 1901. The case proved a difficult one, owing to the very numerous adhesions, which were difficult to deal with. The left ovary was the affected one, and was a large, semi-solid, multilocular cystic mass.

The patient made an excellent recovery; the wound healed by first intention. She was discharged from hospital November 9th, 1901. This case is another example of what one so often finds in such cases, *i e.*, those which give most trouble at the time of operation are often the most uneventful in their after-treatment and recovery.

As a contrast I recall to mind a case I had to deal with soon after I became connected with this hospital. The case was one of a very large unilocular ovarian cyst, complicated with pregnancy in the fourth month. The abdominal incision was very small, not more than an inch and a-half in length. The tumour simply bubbled out through the opening in a most marvellous manner; there was not a single adhesion; the pedicle was very small and easily secured. The whole operation occupied barely twenty minutes, and I looked for a rapid and uneventful recovery, but was doomed to disappointment.

Paresis of the bowels set in very shortly, the abdomen became enormously distended, diarrhœa and vomiting set in, and, in spite of all that could be done, the patient sank in a few days.

Special Article.

CHINESE SURGERY.

By John Knott, M.A., M.D.Univ.Dub., M.R.C.P., M.R.I.A.

As a corollary of the brief article on "Chinese Medicine" in the issue of The Medical Press and Circular for July 23rd, it has occurred to me that the publication of a few authentic items connected with the practice of the healing art in the vast "Dead Sea of Man" might not be unacceptable to some of its readers. My present data refer chiefly to the surgery rather than to the medicine of the "Celestials"; as the latter, I find, although fairly well described as "a simple farrago of nonsense and superstition," presents a startling family resemblance to that of our own forefathers, and, so far as I know, of every other family of the human race at a certain stage of its enlightenment.

Like gunpowder, printing, and various other of the most important means and methods which have from time to time been devised by the more restless members of the human race for the physical and mental improvement of the species, massage was known and systematically used in China for untold centuries before its recognition as a surgical procedure in the lands of modern Western civilisation. In one variety of its practice—that known to the native as *Koung-fou*, a special invention of the Taoist bonzes—there is superadded to the various frictional movements "martelage du muscle et de l'os." This operation is performed by means of small "maillets de bois," of which two kinds are employed: one of a foot in length and six inches in circumference, and the other six inches long and half an inch in diameter. There is another instrument specially devised for the application of rolling friction. It is "essentiellement constitué par deux roulettes accouplées sur le même axe, lequel est monté sur un manche de 20 à 25 centimetres de longueur." Dr. Matignon points out in this connection that his *confrère* Dr. Dudgeon, who has taken special pains in the investigation of the Chinese practice of massage, has clearly shown that many, many ages before Lind had established the principles of Swedish gymnastics, those Chinese priests were acquainted with the elements of "Kinésothérapie."

Dr. Matignon has utilised the opportunities afforded him in this domain by his residence in the Celestial Empire, as Attaché à la Légation de France à Pékin, to collect every available information regarding the present state of knowledge of the healing art in that vast and mysterious nation, and the modes of its application for the relief of physical ills. The conclusion at which he has arrived is, indeed, that which most of us would have anticipated: that China displays in her medical, as well as in her social, practices the unchangeable routine which hopelessly excludes improvement. Although, as in case of some of its mechanical artistic devices, it took a very early lead in a few directions, it assumed the fossil state in prehistoric times; and the net result offered in our own day is that "la médicine des Chinois est moins avancée, et surtout moins intelligente et moins scientifique que celle d' Hippocrate." Their medical literature is copious, and its bibliography has been studiously drawn up, but the whole contents consist of unreasoning commentaries on the works of a few old masters, whose texts, like those of other sacred volumes of Oriental literature, are far *too sacred* to suffer the slightest innovation. Those "masters" of Chinese medicine were contemporaries of Machaon and of Podalirius, who attended to the wounds of the besiegers of Troy.

No Chinese medical practitioner has ever dissected any portion of the human body. Accordingly, their ideas of anatomy and physiology are matters of faith—confirmed by images which have been reproduced during untold centuries. Their osteology teaches that the skull is formed by *one* bone; so is the pelvis; the number of ribs varies with the individual; and at the junction of the arm with the fore-arm is placed a cubital patella. According to Chinese splanchnology, the small intestine communicates with the cavity of the heart; while the colon, after describing sixteen circumvolutions, terminates by opening into the lung. The heart governs the vital processes, in combination with the cavity of the stomach; it supplies all ideas and all pleasurable sensations. The liver is the habitat of the soul, and it is from this gland that all noble and generous sentiments emanate. The gall-bladder is the receptacle of courage; its ascent in the body is the cause of a fit of anger. They have an idea of the continuous motion of the blood; but it seems to be the product of an imagination more riotously oriental than even that which created the other items of their physiological knowledge. They do not know the pulmonary circulation; they, naturally, know nothing of the valves in the veins; they do not even appear to have quite grasped the motor function of the heart itself; but they nevertheless profess to differentiate no less than *seventy-four* varieties of *pulse*—recognisable at the same time on the person of the same subject!

In its ultimate structure the body is composed of five elements: fire, water, metal, wood, and earth. Each of these elements is *in harmony* with the respective members of the series of *five* planets, *five* tastes, *five* colours, *five* metals, *five* solid viscera. All diseases originate from disturbances of the original and essential quintic harmonies of these elements.

As Dr. Matignon remarks, it is very fortunate that the Chinese have "la plus souveraine horreur pour la chirurgie." Direful would be the almost necessary results of the exploration of any of the cavities of the human body by the Chinese surgical practitioner! Accordingly, the "capital" operations are practically unknown; the procedures approaching the dignity of "operation" may be said to be limited to the opening of superficial abscess, the use of acupuncture, and the application of cautery. The Chinese horror of the application of the bistoury is not at all due to the fear of pain, of which these people are peculiarly, even strangely, tolerant. From the days of Confucius to the present, the Chinaman believes that the most precious gift of his ancestors is his body, and that every injury or loss of substance which this suffers is an insult to filial piety—the most devout of all his cherished feelings. This sacred feeling is specially characteristic of the Chinese religious philosophy, and permeates all classes of society. The patients who came under Dr. Matignon's care at the French Hospital in Pekin were induced to undergo necessary operations only on being assured that the ablated matters—tumours, injured or diseased limbs, &c.—would all be carefully restored to them on leaving the institution. With the same religious care the Chinese eunuch preserves (in spirit) the sexual organs of which he has been artifically deprived, that they may be buried with him at last; so that he may present himself with a whole body in the other world to the greetings of his adored ancestors. In this latter case there is a further reason, as we shall see.

The Chinese surgeon is, however, very liberal in the application of acupuncture: the procedure involves, of course, no appreciable loss of tissue. In his paper on the subject of the instruments of surgery used by the Chinese, which was published in the *Archives Cliniques de Bordeaux* (November, 1897), Dr. Matignon reproduces a native woodcut which indicates the position of the "elect" points of acupuncture, which are numerous and by no means far between. He also gives illustrations of the native surgical instruments which he had been able to pick up; they are small in number, and—individually—small in size, as might be expected. The Chinese chiropodist—"homme d'une habileté rare—a un arsenal beaucoup mieux fourni que le chirurgien." There are a small number of small bistouries and of acupuncture needles; we are told of a tongue-depressor, an *ouvre-bouche*, and an insufflation tube for the application of powders—especially in cases of diphtheria. The scissors and forceps call for no comment, except perhaps the *pinces a dents*, which make one think how much more formidable an enemy a Chinese toothache is than a British one. There is a *sonde cannelée* of the dimensions of a strong needle, with an incomplete ring at one end; this is pressed on an abscess till the skin projects through the ring, and the elevated portion is then incised with a bistoury. But *acupuncture* appears to be *the* great surgical procedure of the Celestials. It is employed in the treatment of fracture and of constipation, of ophthalmia and of cholera. Formerly there stood in the Collège Impériale de Médicine a bronze mannikin furnished with a number of small holes corresponding to the favoured points of puncture in the living body. At his surgical examination, the candidate was placed before this mannikin, which had previously been covered with paper; and he was required to pass his needle through the paper into the holes prescribed for the treatment of any disease which the examiner chose to name. Accurate aim proved trustworthy knowledge.

The *moxa* is essentially a Chinese (or Mongolian) surgical device. Dr. Matignon tells us that the llamas construct a moxa of wool, with peas and leaves of mugwort and centaury, dried, pulverised, and rubbed into its interstices. They treat cholera by a generally diffused acupuncture, with special attention to the sublingual, subungual, and circumanal areas. In the last resort, a modified moxa application is used to the epigastrium. A small pile of salt is placed thereon; over that a thin layer of ginger, then dried mugwort leaf. The whole is moistened with alcohol and ignited.

The uterine speculum, the midwifery forceps, and the urethral catheter are unknown to Chinese surgery. There are, however, small leaden bougies which are used to counteract the tendency to urethral atresia in the members of the semi-martyred army of *eunuchs*. This numerous and representative section of the Celestial community owes its existence to a special Imperial privilege, accorded only to the Emperor and to some members of his family. The Chinese Emperor possesses—nominally, at least—3,000 eunuchs. The Princes and Imperial Princesses have a right to thirty each; the nephews and young children of his Imperial Majesty to twenty; the cousins to ten. The representative descendants of the eight Manchu Princes who aided in the original foundation of the present dynasty are also privileged to possess ten eunuchs each. The privileges of the position are so well assured, and the struggle for existence in this over-populated nation is so great, that boys are sold by their parents, and young married men offer their own persons, for the operation of emasculation. No anæsthetic is used. The patient is bound on "une sorte de lit de camp," and his shoulders are firmly held by an assistant, while his legs are held apart by two others. The operator grasps the penis and scrotum at the root in the left hand, compresses and twists them, getting rid of as much of the blood as possible. When ready, he finally asks the question—of the parents in case of a young boy—"Do you consent?" If the answer be affirmative, he removes, with one rapid sweep of the knife, the penis and scrotum—with contents, of course, of the latter—as close to the pubo-perineal surface as possible. The knife may be straight or sickle-shaped; a small hatchet is sometimes employed. Figures of all three such instruments are given by Dr. Matignon, from a Chinese engraving. Startlingly crude as the operation is, there are not more than 3 or 4 per cent. of fatal cases. A tendency to cicatrical atresia of the urethral orifice sometimes proves very troublesome, especially in the younger subjects. But the most frequent troublesome sequela is incontinence of urine. This is tolerated for some time by the operator; if it persists, the latter beats his patient whenever the accident occurs. This treatment is said to be the only efficacious one, and is, accordingly, retained in high favour. A wooden or metallic bougie is used to prevent cicatricial contraction of the urethra proceeding too far. The ablated organs are preserved with religious care, and buried with the owner: the special necessity for this custom will be recognised when it is known that the Chinese Pluto transforms into mule all eunuchs who are transmitted to his realms without those relics. The external wound, after cicatrisation has been completed, presents an approximately triangular outline, with the apex below. The eunuch very frequently suffers from a combination of cicatricial stricture of the urethra with partial incontinence of urine. On this account he is often the victim of chronic vesical catarrh, and even of vesical calculus. Accordingly, with the partial incontinence of ammoniacal urine, the resulting odour is so well known that it is a popular saying in Pekin: "Il pue comme un eunuque; on le sent à cinq cents pas." Such are the usual surgical results of the most formidable operation known in China—as unsurgically performed by the privileged amateur. The omasculated individual—so rendered by the mere removal of the testicles—is not in request in the Celestial metropolis. The privileges of the female sex are very much restrained indeed among the mysterious Celestials. Accordingly, the Chinese of the twentieth century cannot raise the value of this article of classical luxury to the lofty level to which it attained by the competition of the luxurious Roman dames of the time of Juvenal. But the Chinese type of eunuch still ministers to the unspeakable depravity of his master, as did the similar specimen to that of his purchaser on the banks of the Tiber; when the *spado* and the *castratus* were both so familiarly known, and respectively appreciated by the different sexes at so high a pecuniary value.

Dr. Matignon points out that, curiously enough, the Mongolian system of medicine anticipated the late Professor Brown-Sequard by many ages in prescribing the ingestion of the testicles of rams to old men of evanescing energies. The use of mercury in syphilis is well known in those countries, but they are afraid to use it internally: it is accordingly applied to the skin.

If this communication prove of any interest to readers of THE MEDICAL PRESS AND CIRCULAR, I may at an early date discuss some of the internal therapeutics of the Chinese, and indicate their similarity to those of other primitive peoples.

Austria.

[FROM OUR OWN CORRESPONDENT.]

VIENNA, August 2nd, 1902.

INFANTILE TABES.

KAUFMANN at the "Gesellschaft der Innere Medizine" showed a boy, æt. 10; had always been healthy with the exception of measles when five years old. Three years ago incontinentia urinæ in the form of enuresis nocturna commenced and still exists. One year ago the gastric crisis commenced, which has assumed the form of pain, vomiting, and even fits every three or four weeks, lasting two or three days at a time. After forty-eight or seventy-two hours the attack gradually recedes, and is succeeded with a day's very severe thirst. During the interval, the boy is fairly well with a good appetite, and can eat anything without the slightest discomfort.

At the present time there is pupillary spasm, loss of patellar reflex, undoubted Rombergism and incontentia urinæ; beyond this there is no other loss of either motion or sensibility.

The papilla of fundus in left eye was pale, without any further very marked pathological changes. The deep and cutaneous sensibility of the extremities were intact. There was a decided thickening of both radial arteries, as well as deeper outline of the stomach on percussion. No symptom of acquired syphilis could be discovered. The mother had two other healthy children, and never had had an abortion; the father was not examined.

The whole symptoms, though complex, have an appearance of genuine tabes dorsalis occurring in a boy, æt. 7, who had always been well till this incontinentia urinæ commenced last year.

Against the assumption of it being paralysis is the perfectly normal and healthy condition of the mind; his intelligence is good, as the testimony of his teacher is that he is as well forward and mentally active as any other of his boys in the school.

Pseudo-tabes may equally be dismissed from our diagnosis, as Kalischer tells us that children suffering from this are more or less nervous, having symptoms of lues with psychic phenomena, transient forms of cramp, paralysis, epileptoid attacks, &c., &c.

Hochwart asked if the incontinence was only by night and never by day.

Kaufmann replied that it was invariably by night and never by day.

Hochwart thought the case of extraordinary interest, as enuresis nocturna existing three years was a very unusual early symptom in the course of infantile tabes dorsalis. Such a symptom must be of immense importance in the future differential diagnosis of infantile enureses

Neusser quoted a similar experience in one of his own cases of tabes dorsalis where the history of lues was indisputable.

NEPHROLITHIASIS INFANTUM.

Kienböck treated the Society to a demonstration in radiograms of concretions in the kidney with a discussion on the technique.

One of these cases of nephrolithiasis was interesting from history and long standing.

The patient was a female, æt. 32, who had been affected in youth. The bones were ankylosed, with an early inhibition of growth and hypoplasia of the whole system, except the cranial skeleton. There were also muscular atrophy and myxœdemal conditions of the subcutaneous cellular tissue associated with a pronounced infantilism.

The whole details of the skeleton pointed to an enchondral and periosteal dysplasia, with diminution of the facial bones—particularly the lower jaw—kyphoskoliosis, osseous ankylosis of the extremities, such as shoulders, hands, hips, knees, ankles, toes and fingers, with renal stones in both kidneys.

The disease seems to have commenced with a severe acute fever in the seventh year; the patient up till this age had been perfectly healthy. This was associated with pain, recurrent swelling of the joints and contractions; the latter occurring in the lower extremities three years after the first attack. The pain in the joints and diaphyses lasted for several years, but are now less painful. At the points of the fingers absorption has taken place in porous parts of the phalanges, leaving the fingers loose and wobbling. Renal colic is now almost gone, and has been trifling or stationary for sixteen years.

Kienböck did not consider this as a case of rachitis, as it usually passes as a temporary affection when appearing in youth. Neither could he entertain the idea of osteomalacia, as no bending or twisting of the bones were present, such as the heart-shaped pelvis, which usually takes place when feebleness sets in. Again, the acceptance of a lesion to the hæmatopoietic glands was a remote deduction, although the probability of infantile myxœdema might be pressed with reason.

His own opinion is that the cause was originally infectious, toxic or diathetic, which injured the entire system, especially the joints, producing in the first place synovial polyarthritis of an acute nature at first, subsequently recurring, and finally closing with contractions, ankylosis, and loss of power in the phalanges. The cessation of the growth of the long bones, spongiosa and muscular atrophy of the skin, must all be viewed as arthogenic in origin. The atrophy of the facial bones may have been inflammatory, as there is very little impairment of the mobility. The broken teeth and altered condition of the bones are in favour of this assumption.

Neusser asked what value should be put on the absence of the large glands in this case, as he was inclined to attribute the whole cause of the retarded growth to a loss or lesion of the thyroid gland.

Kienböck replied to this by saying that the neck was so short and deformed that he could not practically palpate this organ with any other result than a negative one, on which he put no value as thyroid psychical changes were absent; and, what was more important in the history of the case is that individuals suffering from infantile myxœdema do not reach thirty years of age! Again, the patient was born in Vienna, and for seven years enjoyed excellent health in a city where endemic cretinism is unknown. It must be admitted, however, that there is a combination of hæmatic gland disease in combination with the polyarthritis as the affection of the hypophysis shows. It is assumed that the general or "consecutive" trophic disturbance so injured the glands and secretion that growth was checked.

Atasia et Abasia with Nystagmus.

Hofbauer showed a patient who had suffered from astasia et abasia, or inability to stand or walk after emptying a large quantity of chloroform from one vessel to another in the laboratory. This form of chloroform poisoning is rather unique. After finishing he was suddenly affected with severe headache, vertigo and a pungent, sweet taste in the mouth. Next morning he felt fairly well, but in the afternoon was unable to stand or walk. When admitted into hospital the motility and deep sensibility was intact, although Romberg's phenomenon and nystagmus were very prominent. Ocular examination revealed no morbid condition in the fundus or nerve apparatus. After three days rest walking was again tried, which gradually improved till both abasia and atasia as well as the nystagmus had quite disappeared.

The Operating Theatres.

GUY'S HOSPITAL.

Pott's Fracture.—Mr. **Arbuhnot Lane** operated on a woman, æt. 60, who had sustained a bad Pott's fracture a year before. She had been unable to walk, or indeed to bear her weight upon the damaged foot, and preferred to have it amputated if the pain she suffered from it could not be alleviated. It was evident that the internal malleolus had been broken off, that the lower end of the tibia had been displaced forward, and that the fragments of the fibula formed with one another a considerable angle. She had been treated by very competent surgeons, who, Mr. Lane said, adopted the usual ineffective methods of treatment, and were satisfied to leave the poor woman a helpless cripple for the rest of her life rather than obtain for her a perfect mechanical result by forgetting for a few moments their obsolete and pernicious creed. Mr. Lane made an attempt to replace the tibia and fibula in their normal relationship to the astragalus, but the length of the interval that had elapsed since the injury, the degree of displacement of the fragments, and the age of the patient rendered it impossible. He was obliged to excise the ankle-joint, which he did by means of a chisel. The progress made by the patient was most satisfactory in spite of her age and the considerable extent of the operation.

Mr. Arbuthnot Lane operated in a case of fracture of the ulna at the junction of the middle and lower thirds. The fragments were much displaced on one another, and there was approximately little or no callus connecting their ends. The displacement prevented any rotation of the radius in its length, and the want of firmness of the uniting medium rendered the fore-arm hopelessly insecure and useless. More than three months had elapsed since the receipt of the injury, and the man was unable to do any work whatever. The fracture had been treated, Mr. Lane said, by that pernicious arrangement which is called an internal angular splint. The ends of the fragments were exposed and freed from the callus and fibrous tissue about them. They were fitted accurately together and fixed immovably in position by a couple of pins of silver wire. The progress made by the case was most satisfactory, and the bones united firmly and securely with no displacement whatever. Mr. Lane pointed out the very great difficulties that are often experienced in operations performed to restore to their normal form badly united fractures of the radius and ulna, which are exceedingly common. He had operated on a large number of these cases, affording the patients a greater or less amelioration of their mechanical disability. He had called attention to the folly of treating fractures of the radius and ulna by the internal angular splint, and had given his reasons against it in a recent number of the *Clinical Journal.* He hoped that a growing familiarity with radiography would educate the public into appreciating the extraordinary weakness of the splint treatment of fractures, and the facility, safety and certainty of operative interference in suitable cases. A steady improvement in the aseptic methods of the surgeon will also render him more confident in himself and more ready to adopt a scientific treatment of those injuries.

CANCER HOSPITAL.

Laparotomy *per se* for Incurable Abdominal Cancer.—Mr. **Chas. Ryall** operated on a woman, æt. 58, who had been admitted suffering from abdominal pain and tumour. She had had these symptoms for the last three months, during which time she had lost both flesh and strength. There had been occasional vomiting and obstinate constipation had been a marked feature. The pain was referred to the right hypochondriac region, and extended round to the back; there had never been any attacks of jaundice. On examination the cæcum and ascending colon were found to be much distended; the tumour could be detected in the right hypochondrium; it was round and smooth in outline, with a fair amount of mobility, and appeared to be connected with the liver. Malignant disease was diagnosed and laparotomy was recommended because, if even the tumour could not be removed, yet the patient would probably derive considerable benefit from the simple laparotomy. The abdomen was opened in the right linea semilunaris, and a malignant growth was found springing from the under surface of the liver. The hepatic flexure of the colon was attached to it by some firm bands of adhesions which, no doubt, were the chief cause of the constipation and distension of the cæcum and ascending colon; they were therefore divided. It was found quite impossible to attempt to eradicate the growth, so the abdominal wound was closed and the patient put back to bed. Mr. Ryall said that he considered all cases of intra-abdominal malignant growths should be explored, even where it was quite apparent that any radical operation was out of the question, as in his experience so many of these cases derive considerable benefit from the result of the laparotomy alone, pain being relieved, the growth shrinking, the subsequent history of the case being chronic, the patient improving to a marked extent, and life being prolonged sometimes for years. It is difficult, he thought, to explain the therapeutic effect of this simple laparotomy, and why it should frequently retard the progress of malignant disease in one case and in another cure a case of tuberculous peritonitis. Possibly in both cases it might, he considered, be due to some vascular change resulting from stimulation of the splanchnic nerves. In his experience, he remarked, he had had one very remarkable case of an abdominal tumour in a man, æt. about 45, who was suffering from persistent and progressive jaundice, rapid emaciation (the weight falling from fourteen to ten stone). There was constant vomiting, the patient being unable to retain any solid food and but small quantities of liquid; he had suffered from these symptoms for six months. For these symptoms various drugs had been tried, but the patient progressively became worse. On abdominal exploration a nodular growth, the size of a clenched fist, was found implicating the head of the pancreas, and as radical operation was impossible, the abdomen was closed and the patient put back to bed. At the time of operation a hope was anticipated that some benefit might be derived from the simple exploration, but scarcely to the extent which subsequently took place. Without any other treatment than rest in bed for a few weeks this patient began and continued to improve in a marvellous manner; the sickness ceased, the jaundice gradually disappeared, the tumour in a similar manner disappeared. The man rapidly put on flesh and now, nine months after the operation, he weighs, and has for some months weighed, over fourteen stone; he feels well and strong, is doing his ordinary work, and is to all intents a healthy man, without any apparent evidence of disease.

Cancer Research.

The Treasurers of the Middlesex Hospital have received from an anonymous donor, per Mr. A. Pearce Gould, F.R.C.S., the sum of £100 to the fund for developing the work of the Cancer Research Department of that hospital. Messrs. N. M. Rothschild and Sons have given £1,000, and the Leathersellers' Company £250, towards the £100,000 required for cancer research.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 6, 1902.

THE ADDRESS IN MEDICINE AT THE BRITISH MEDICAL ASSOCIATION MEETING.

To Sir Thomas Barlow has fallen the task of delivering the Address in Medicine at the Manchester meeting of the British Medical Association. His oration, dignified and scholarly, was worthy of the long line of distinguished addresses that have fallen from his predecessors. He began with a graceful reference to the late Sir William Roberts, who addressed the Association under similar circumstances a quarter of a century ago in Manchester, and who has left an indelible mark in the pages of modern medicine. Sir Thomas Barlow touched upon a great many subjects in the course of his address, but, as he pointed out, it would have been impossible even to enumerate all the advances made by medicine during the twenty-five years that had elapsed since the last meeting of the Association in that hospitable city. The main thesis of the address was that the advances in the treatment of disease have been real and satisfactory in proportion as they have been harmonious with the complete knowledge of the natural history of disease. In other words, our curative methods have become more extended and satisfactory as our knowledge has come to rest upon a more assured basis of facts. In some cases the discovery of the exact cause of a malady has not been attended with a corresponding ability to counteract its ill-effects. An example of that kind is found in the case of tetanus, which in its acute form is not yet amenable to the tetanus antitoxin, although some benefit is obtainable from its administration in chronic forms of that formidable affection. It is impossible to doubt, however, that sooner or later the key to the cure of that and other maladies of specific origin will be safely grasped in the hand of science. In the present stage of human knowledge much remains to be learned, and much of our therapeutic practice necessarily rests upon an empiric foundation. As every thinking physician must recognise at an early period of his career, it is in the period of half knowledge that the practice of medicine has often cut a sorry figure, for theoretical lines of treatment, based on incomplete physiological and chemical data, have often produced melancholy failures. From the reverse of that picture Sir Thomas Barlow draws a reassuring lesson. The outcome of the new experimental pathology of the last quarter of a century, he points out, controlled by clinical observation, applied and tested by clinical experience, has justified us in claiming that at length our work has ceased to be fairly described as groping in the dark, and that in some definite instances medicine has justified for itself the designation of an exact science. Even in dealing with incomplete data methods have gone on improving as the result of careful study and investigation. Although we are still ignorant of the micro-organism of rabies we are none the less convinced that it is the cause of the disease. The working hypothesis of Pasteur that in the dried spinal cord of an animal that has died of rabies the micro-organisms are destroyed, but that the immunising substances remain active, seems to have been more than justified by subsequent experience. There can be no reasonable doubt as to the prophylactic value of Pasteur's methods, although no beneficial effects follow their employment in the developed disease. But when a complete analysis of the life-history of the organism has been attained we may fairly look for still greater results in the therapeutics of the malady. The lecturer drew a striking instance of a kindred nature from "the great triumph of English protective medicine, namely, vaccination." One of the most valuable results of the recent Royal Commission on Vaccination was that it gave a direct negative to those who thought that finality had been attained on the old lines. The most recent methods of preparation by carefully-regulated glycerination, and the getting rid thereby of a large amount of the secondary infection, marks an enormous advance in the practical application of vaccination. The variable results of antistreptococcic serum point to the fact that although the streptococcus is the organism common to many forms of septicæmia, it seems there must be various strains, each requiring its special antitoxin. Other parts of this brilliant Address dwelt upon the treatment of various specific conditions in the light of modern science, notably diphtheria, tuberculosis, and malaria. Not the least suggestive portion of the speaker's remarks dealt briefly with the possible ways in which future advances would be made. The Manchester Address in Medicine will be remembered for its breadth of grasp of the practical issues before the profession, and should be carefully read and re-read by everyone interested in a great and progressive subject, dealt with, as it was, by a master hand.

THE REVISED CURRICULUM OF THE IRISH CONJOINT EXAMINATIONS.

THE alterations in the curriculum of the Conjoint Examinations by the Royal Colleges of Physicians and Surgeons in Ireland, recommended by a special Conference Committee appointed for that purpose, have been finally adopted by both colleges, and have been brought into force. The changes, which have been made, have been the result of an effort to bring the examinations of the colleges into more close correspondence with the examinations of the English and Scottish colleges. Perhaps the most important of them is the acceptance of the principle that the subjects of the first professional examination may be studied either at a medical school or at an institution other than a medical school recognised by the colleges, after due inspection, for instruction in these subjects. The principal remaining alterations are the elimination of one course of instruction in Anatomical Demonstrations and Dissections and of the course of Practical Pharmacy, the alteration of the period of instruction in mental diseases from three months to one month, and the addition of a systematic course in Pathology. Further, various slight alterations have been made in the grouping of the subjects for the different examinations, with the object of simplifying the curriculum as much as possible without interfering with its value. It will doubtless be a subject of regret to many that the Royal colleges should have found themselves compelled to omit any portion of their former curriculum, and especially that they have been drawn into copying the by no means commendable example of the English colleges regarding the first year of medical study. Unfortunately, however, the Irish colleges do not appear to have had any alternative. If the General Medical Council was powerless to prevent the deviation of the English colleges from its regulations, the Irish Colleges were similarly powerless to prevent the deviation of students to England, save by offering them as simple a curriculum as the other licensing bodies. A certain amount of misconception appears to have been present in the minds of some members of the profession as to the object of the alterations which have been adopted, and an attempt was made to show that in reality it was a rearrangement of hospital fees which should have occupied the attention of the Conference Committee and not a curtailment of the curriculum. This, however, is scarcely correct. It is a matter for deep regret if the alterations in the regulations regarding the first year of medical study prejudicially affect the medical schools, but that some reduction, either real or apparent, in the number of years of medical study was necessary, and that without such reduction the lessening of fees for hospital attendance would have been of no avail, is apparent to all familiar with the matter. Similarly, other alterations were made to enable the same certificates of lectures taken and courses attended, which would admit a student to any of the professional examinations of the English and Scottish colleges, and even to those of the Royal University of Ireland, to also admit him to the corresponding examination of the Irish colleges without necessitating attendances on additional courses with a corresponding delay in time. The time of the student is quite as valuable as his money. We regret that it should have been found necessary to make some of the alterations which have been made, a regret which we are sure is felt by those who recommended them; but the alternative to making them was to see our Irish students passing over into the hands of the English and Scottish licensing bodies. It was not the Irish colleges who voluntarily adopted a course of curriculum pruning.

THE STORING OF POISONS.

One of the strangest anomalies in our social state is the care we take in the sale of poisons. The pharmaceutical chemist, if not actually required to keep poisons locked up, is expected to do so, and as a matter of fact all the more quickly lethal drugs are stored under lock and key. In the sale a series of precautions is enforced, rightly enough, to make sure the purchaser recognises the dangerous nature of the commodity he buys, and also to test, to a certain extent, his suitableness to use the poison. So far the law takes almost parental care. But once the retail customer puts the drug in his pocket the law enforces no obligation on him, He may allow the poison to lie on the nursery floor or the kitchen table; he may put it on the mantelpiece or in a cupboard. From this carelessness many deaths have resulted, and the wonder is that these have not occurred more frequently. We are reminded of this by the report of a case in the newspapers last week, in which a woman was accused before the magistrates of having attempted to poison her husband by giving him a tumbler of water in which lumps of cyanide of potassium were partially dissolved. Our readers are aware that cyanide of potassium is one of the quickest and most deadly of poisons, and in this household we find it in such quantities and so kept that a woman finds large lumps of it. In a case tried not so many years since, sworn evidence was given that ounce papers of powdered strychnine lay on shelves in the kitchen, the papers torn open. We think it is time that all persons buying poisons, for trade or other legitimate purposes, should be required to keep them in a bottle or jar locked up, except when in actual use. If when a purchaser of a poison brings it home he can let it lie about, careless of the consequences, all the previous safeguards are seriously discounted. In a private house even more than in a pharmaceutical chemist's the utmost care should be taken in the storing of poisons. No person should be allowed to keep them in a place where children or servants could come at them. And we would go further and prohibit the sale of poison to any person of drunken habits. It might lessen the risk if the purchaser were required to sign an obligation binding him to keep the poison locked up, in a place separate and distinct from all powders, bottles and so forth, required for household purposes. All tradesmen and others using arsenic and the cyanides should be compelled, under the penalty of a smart fine, to keep their chemicals in a place of safety and to see that they are all locked up before discontinuing business every day. These precautions may be considered very stringent, but no stringency can be complained of that is necessary for the preservation of life.

Notes on Current Topics.

The Health of the King.

It is with profound satisfaction we learn that the progress of the King towards recovery is presenting an unbroken record. No apprehension need any longer be felt that his Majesty will be unable to attend the Coronation ceremony on the 9th instant, and to withstand the fatigues of that important day. At the same time it must be remembered that no convalescence from so serious an operation as that recently undergone by his Majesty can be looked upon as absolutely safe and free from the risk of complications. In the present case we are glad to say that there is not the slightest reason to suggest that any untoward accident may intervene in the course of the few days that remain between now and Coronation Day. His Majesty has had the best modern surgical skill available, which in itself is nine-tenths of the battle. His own cheerful and resolute character, we doubt not, has contributed in no small degree to the happy issue that has filled the whole heart of the nation with heartfelt satisfaction. It now remains for the medical men in attendance to take every precaution that no unnecessary risk is run during the journey back to London and the subsequent ceremony. It may be taken for granted, however, that his Majesty's medical advisers will continue to exercise their skilful care and ministrations in whatever direction their experienced foresight may determine.

Small-pox in London.

The downward curve marking the course of the small-pox outbreak in London has maintained its fall in a satisfactory fashion. During the past week there were some 400 patients under treatment, but on the 24th inst. the Asylums Board received no notification of a fresh case, a freedom which has not been similarly recorded for eleven months. The outbreak commenced in earnest in August, 1901, in which month 96 cases were reported. There were 188 cases in September, 309 in October, 473 in November, 804 in December, 1,283 in January, 1902, 1,572 in February, 1,999 in March, and 1,370 in April. In June the number of cases dropped to 602, and in the present month thus far there have been only 148. The total deaths from small-pox from August 10th, 1901, to July 24th, 1902, have been

1,620. That figure is equivalent to about 17 per cent. of the admissions to hospital, which were about 9,000. The cost to the public has been very heavy, and has been estimated to be between £400,000 and £500,000. In 1877 there were 6,620 cases; in 1881, 8,671; in 1884, 6,567; and in 1885, 6,344. If the present fall in incidence of the disease, therefore, is a mark of its early disappearance, London will have escaped pretty lightly. It is to be feared, however, that the present fall points merely to a lull in the storm. It is highly satisfactory to learn that not a single nurse has even been attacked by the malady.

What are Women Sanitary Inspectors?

The proper title of the women who have been appointed to the post of sanitary inspector in various parts of the United Kingdom is exercising the minds of some of the local authorities. It has been attempted to solve the problem in various ways. As it is clear that these women officers do not overlook sanitary matters the term "sanitary inspector" applied to them is evidently a misnomer. Some worthy councillors, who apparently scent reproach in the good old Saxon word "woman," have substituted "female" or "lady." The average sensible-minded Englishwoman, whatever her station, would most likely choose the term "woman" as the best and most suitable description. Aristocratic Kensington thinks otherwise, and has called these officials "lady inspectors of workshops." Apart from the snobbishness of the word "lady" in this connection, the rest of the innovation seems sensible enough. If the women are appointed to inspect workshops it is better to imply that duty in their titles rather than to call them by names that furnish an entirely misleading idea of their duties. In some districts their chief duty is to inspect small tenements and lodgings, and to advise the poor in elementary matters of health. The chief danger of calling such women "sanitary inspectors," so far as appears on the surface, is, that being appointed in place of the ordinary staff of men sanitary inspectors, but discharging other duties, they may indirectly tend to lessen the working sanitary staff, which is already almost universally far too small.

The Evolutionary Aspects of Infectious Diseases.

On two separate occasions in the course of the present year Professor G. Frank Lydston, of Chicago, lectured, "by invitation," on the fertile subject of "The Evolutionary Aspect of Infectious Diseases, with especial reference to the local Venereal Diseases." The published reports form one of the most suggestive documents which we remember having read for some years—in connection with any department of the healing art. His grouping of, and reasoning on, such facts as: dogs succumb to the anthrax bacillus only when pure cultures are injected intravenously; young rats die of general infection, while older ones develop only small abscesses, unless a large number of bacilli are injected directly into the circulation; frogs and tree toads are resistant at medium, and susceptible at higher temperatures; fowls resist anthrax ordinarily, but if they become chilled they rapidly succumb to it; pigeons resist it, save when semi-starved; the tetanus germ is inoperative save when inoculated simultaneously with foreign material, such as splinters of wood, dirt, and pus;—are most suggestive. "How familiar the foregoing facts sound to the student of a quarter of a century ago. Age, exposure, innutrition, lowered resistancy—special conditions as invitations to contagion. Really, specific science has not yet done away with old-fashioned things. The pneumococcus is the specific microbe of pneumonia, but for some reason it often demands a chilling of the cutaneous surface in order to flourish and wax fat in the lungs." And the lecturer goes on to reflect: "How unfortunate that we cannot duplicate in the laboratory the conditions natural to the germ. How much more modest should be the claims of modern bacteriology." The successful employment of injections of pure cultures of Bacterium coli commune in chronic constipation is a highly suggestive result. The Bacillus anthracis has been converted by evolutionary culture into a harmless putrefactive organism. Pasteur had modified nearly all disease germs by culture, and established a great biological law; but the profession at large never grasped the meaning of his results. He merely gave feeble imitations of nature's work under conditions which man has not yet been able to reproduce. Dr. Lydston expresses full belief in the *de novo* origin of venereal disease. Possibly the twentieth century will rewrite the pathology of infective diseases. That which has been built upon bacteria would appear to require to have its foundations readjusted.

Infection and Tissue-Resistance.

The subject of "Lung Development in the Child" is dealt with in the May number of the *Journal of the American Medical Association* by Dr. J. Allen Gilbert (Portland, Ore.). Besides pointing out the importance of good food, fresh air, judicious gymnastic exercise, &c., Dr. Gilbert contributes observations on the importance of prophylaxis and the maintenance of tissue-resistance, which contain a far greater percentage of sound sense than we usually find in the majority of scientific contributions to practical medicine. As he truly states, the individual patient is now often forgotten in the eager pursuit of the respective causative germs. "There are two elements to be considered in ætiology and prophylaxis: the external agencies and the individual himself. It is difficult to decide which is the more important. Pathological conditions always depend upon the relative strength of the infection and the infected. Were it not for the vital resistance of the human tissues against external invasion, our history would have been written long ago. Prophylaxis for all infectious diseases can be summed up in the one principle of weakening the invader and strengthening the invaded. Relatively too much strength is expended in weakening and destroying the invader, leaving the individual fearful and defenceless in the presence of his self-induced weakness." The limitations of that very unreliable quantity, the human understanding, seem to have effectually shut out from the mental view of the average bacteriological pathologist the most important fact that, in any given case of infective disease, the successful catching and killing of all microbes present would not effectually cure the patient; also the great preliminary fact that no microbe can ever take root in tissues which have not already been placed in the appropriate condition of receptivity. All disease germs which fall upon perfectly healthy tissues necessarily undergo the fate of that portion of the seed of the gospel parable which "fell upon a rock."

Trichina Spiralis in Australasia.

In a recent number of the *Australasian Medical Gazette*, the first recorded case of *trichina spiralis* hailing from the Antipodal Continent has been published by Dr. E. Angus Johnson, of Adelaide. A painter, aged 44, who had never been out of the Colony, developed cancer of the lower jaw on the right side, for which he submitted to an operation. He also presented evidence of aortic and mitral valve disease. There was a record of *typhoid fever* of four years' previous date. The "notes" of that *typhoid* attack were as follows:—"When seen by the doctor for the first time he had been ill for three weeks with dull heavy pains in the forehead, back of head, chest, thighs, right side; and general debility; also a slight cough. He had been in bed one week before he saw the doctor, and remained two weeks more in bed, by which time the pains had entirely disappeared. His temperature was 100·4° in the morning and 102° in the evening that he first came under medical notice, and then was normal for the rest of the illness." The cancerous lower jaw of this patient was removed by Dr. Johnson and Professor Watson, of Adelaide. It was observed "whilst cleaning out the glands in the neck" that the muscles (sterno-mastoid, sterno-hyoid, and digastric) were "studded with small white specks resembling the ova of pediculus capitis. These deposits were noticed to be much more numerous towards the tendinous ends of the muscles than in the muscles themselves." Dr. Johnson's patient had been a great eater of polonies (sausages), and had suffered from symptoms of plumbism three or four times since his "typhoid." He appears to have recovered from the operation, and we are promised a later report. The conclusion for the present is, "Now that it has been discovered here, a further crusade against rats must be commenced, since the trichina spiralis is a parasite belonging to that rodent, and the pig gets infected from eating these diseased rats (which are frequently found infesting slaughter yards)." What with the consequences of the informations which have been filed against the rat in the plague and trichinosis cases, we anticipate that the future earthly career of "that rodent" is not likely to prove a happy one!

The Vision of the Army Recruit.

Some very sensible criticism on the present system of testing the vision of his Majesty's Army recruits is given in the last number of the *Indian Medical Gazette*. The test-dot card now in use is, of course, familiar to all. The dots are each one-fifth of an inch in diameter, and should be visible to a normal eye at a distance of fifty-seven feet, as it then subtends an angle of one minute. Some persons can count them even at a distance of ninety feet. The Army candidate is required to count the dots at a distance of ten feet only—represented a standing visual acuity of approximately one-sixth the healthy normal. For departments, &c., counting the dots at five feet is sufficient. The former (ten feet distance) test assures us that the soldier will be able to see a bull's-eye of three feet diameter at a distance of 600 yards—more or less distinctly. The object of the test professedly is to decide whether they are capable of becoming good marksmen. As Surgeon-Captain Munson, U.S.A., writes: "Successful use by the soldier of long range fire-arms demands that his vision *shall be normal* or so nearly normal that there need be no question of his ability to see the target at all ordinary ranges." From the remarks already made, it will be seen that there is no guarantee of such standard supplied by the test to which our recruits are subjected. And the comment of the "editorial" on this question in our contemporary is surely a just one:—"It is, to say the least, anomalous that such care should be taken in measuring height and chest to the fraction of an inch and remain satisfied with our present meagre knowledge of the visual capabilities of the recruit."

Insects and Civilisation.

An accomplished scientific writer, H. C. McCook, D.D., Sc.D., calls attention in the June number of *Harper's Magazine* to the important part which insects have throughout played, and still continue to play, in the adaptation of the earth's surface to the wants and comforts of man. Even before the publication of Charles Darwin's epoch-making volume on "Earthworms," this reverend author had contributed to the pages of the "Proceedings of the Academy of Natural Sciences of Philadelphia," a paper which revealed an agency of the ants of that city in their treatment of the upper layers of the soil, very similar to that which was so lucidly demonstrated for the efforts of the previously ignored earthworm by the great apostle of evolution in his last contribution to the study of his life. Indeed, it must now be recognised that insects dispose of decaying and mouldering vegetable and mineral matter by processes analogous to those by which the bacteria deal with diseased and dead animal matter; they tear it to pieces, they plough and harrow it, and spread it abroad in new and neutral forms ready for the reception of new seeds of life, and for future contribution to chosen representatives of the various kingdoms of nature. The reflection also necessarily recalls the importance of the presence of the flea in the transmission of plague, and of other insects in other inoculable diseases.

Identification of the Fundus Oculi.

IN a recent number of the *Journal of the American Medical Association* Mr. F. Weymann has advanced the theory that the individual human being can, at any time throughout the remainder of his or her life, be surely and incontrovertibly identified by examination of the *fundus oculi*, if accompanied by an approximately accurate drawing of the optic papilla and an investing retinal circle, whose circumference is separated from the scleral ring by a distance equal to the length of two papillary diameters. Even the disposition of the arteria centralis retinæ and its branches would alone, according to this observer, be sufficient to establish identity. So far unlimited is the multiplicity of the anatomical dispositions of the vascular ramifications, that he has never yet found the arrangements alike, even in the two fellow-organs of a single individual. The points to be specially noted for future identification are:—(1) The method of division, dichotomous or otherwise; (2) the exact point of division; (3) the exact angles of the vessels with the primary meridians; (4) the exact distance of one divisional point from the other; (5) the relative size of the divided twigs; (6) the angle of division; (7) the course of the twigs, straight, curved, &c.; (8) the exact distance, everywhere and at every point, between venous and arterial branches (parallelism, convergence or divergence, twining, &c.). If this very interesting communication receive satisfactory corroboration from other observers, the officers of justice can be furnished with another important weapon. A criminal cannot so successfully modify a *fundus oculi* by physical agents as he can his cutaneous surfaces—complexion, features, finger-tips, &c. The application of paints, cosmetics, caustics, new and bewildering tattoo decorations, and such, may be satisfactorily excluded. There is surely a great deal in this.

Surgery of the Prostate Gland.

THE surgery of the prostate gland has been well in evidence during the past five years. The latest important contribution is a very interesting one by Dr. W. N. Wishard, of Indianapolis, Indiana. The author deals with the procedure of direct application of the cautery to the affected organ, which he does through an artificial opening in the perineum. We are quite of his opinion that "the cautery when used upon the prostate should be used with the operative area under the direct observation of the operator," and that "changes in the condition of the urine, functional disorders of the bladder, and digital examination by the rectum afford very inadequate evidence of the character of the obstruction." For the application of the cautery, Dr. Wishart has devised a special instrument. He uses a straight tube of six and a half inches in length and forty-two millimetres in circumference, with an oblique opening at the distal end. There is an "auxiliary tube" which carries a small incandescent lamp of low heating power. He uses three modifications of the galvano-cautery knives—for the nose, throat, and corresponding localities. To obtain a wider range of exploration and of contact he has utilised the principle involved in the construction of the so-called "alligator-jawed" forceps. By this means the cautery-knife can be made of any length and shape, and can be readily used for the removal of intra-vesical tumours. When such operation is called for, the bladder is previously distended with air, and the lens system in the auxiliary tube is so arranged that the surgeon can "see at a right angle." The use of such an instrument is, of course, of immense value for diagnostic purposes alone. Dr. Wishart reports some very encouraging results, which we think that he has thoroughly deserved. His methods represent a worthy item in the progressive march of twentieth-century surgery.

A Case of Double Tongue.

A RECENT number of the *New York Medical Record* contains a description of a case of double tongue which was discovered in the buccal cavity of a Jewish boy, æt. 5, by Dr. Albert Setz, of McMinnville, Tennessee. This boy had suffered from pain in the mouth, due to carious teeth; and his father in exploring for the source of pain, in the night preceding the visit to Dr. Setz, found the duplicate organ springing from the angle of junction of the normal tongue with the floor of the mouth. It was about an inch in length, and somewhat broader than the normal tongue which lay above it. He is one of a family of six, and neither he nor any of his brothers appear to possess any other noticeable abnormality. However, the abnormal lingual organ does not appear to trouble the boy in any way, and he speaks with the greatest distinctness. Accordingly, Dr. Letz did not recommend any operative procedure, except for the treatment of the carious teeth.

Tenement Houses in Dublin.

THE fall of a tenement house in Moore Lane, in which a child twelve years old lost his life, is an object-lesson that cannot quickly be forgotten. At first the sympathy of the public for the parents of the boy who was buried in *débris* so occupies the people that the very serious nature of the fatality is almost lost sight of. Here is one of a large number of houses which are occupied from roof to cellar by the poor, usually one family to a room, and one of these houses becomes so rotten with age that it falls. Can it be said that such houses are suitable for dwellings, even for the poorest? Ought an owner to go on receiving rents for rooms which are little more than death-traps? How does it come to pass that with a large sanitary staff of highly-paid officers that unsafe buildings are not condemned and taken down instead of being allowed to fall down as this and many other such have done in the city. One death only in this catastrophe; but how many children would have been victims had the poor room-keeper been less intelligent or less active in clearing a large number out of the house? The poor are troubled about so many things, life with them is so hard, the perpetual struggle for existence so sharp, that fatalities such as the Moore Lane one are soon forgotten by all, except, perhaps the boy's parents; and the old houses with broken windows, creaking doors or hingeless ones, with their dirty walls and insanitary surroundings, remain the only refuge for the destitute.

Malpraxis Action against a Colliery Surgeon.

At Nottingham Assizes last week a colliery surgeon, Mr. W. C. Rainsbury, was defendant in an action brought against him by a collier for negligent and unskilful treatment. The plaintiff's elbow was badly crushed on November 26th, 1900. The arm was much swollen, and it was some time before Mr. Rainsbury could diagnose the injury. In the beginning of January the plaintiff went to two bone-setters. Dr. Rainsbury advised him to go to the Nottingham General Hospital, where, by means of the X-rays, it was discovered that there was dislocation of the elbow and other injuries. Eventually the plaintiff came to London, and was operated on at Charing Cross Hospital. The surgeon, Mr. Charles Gibbs, stated his opinion at the time that any practitioner of ordinary skill and with ordinary care could have reduced the dislocation by the ordinary process immediately after the accident, and that the swelling would not have been so great as to preclude the possibility of a definite diagnosis. This statement, if correctly reported, certainly does not agree with the average surgical experience. A London hospital surgeon is the last man in the world we should have expected to appear in the witness-box with dogmatic assertions of this kind reflecting upon the skill of brother practitioners. Hospital surgeons sometimes require sympathy, forbearance, and charity for errors of omission and of commission. *Crede experto.*

Overcrowding on a Troopship.

A cablegram from Albany, Western Australia, states that on the arrival of the troopship *Drayton Grange*, with 2,000 troops on board, complaints were made as to the want of accommodation which had been experienced during the voyage. The health of the ship was anything but satisfactory, considering there were 100 men under treatment, suffering from measles and pneumonia, of which nearly a half were severe cases. This is a serious state of affairs, and one which is absolutely unnecessary. There are plenty of passenger steamers plying between the Cape and Australia, and if, when the *Drayton Grange* had on board as many troops as could be carried with comfort, a hundred or a hundred and fifty remained over, which number, naturally, would not be large enough to warrant the sending of another transport, it would have been better to have given these men their passage on one of the regular passenger ships. This was done over and over again when sending troops to the front, and when, moreover, time was an important factor. It is surely unnecessary at this hour to enlarge on the bad effects of overcrowding, but bad as it is in all cases, it is worse in the case of men more or less worn out by a long and arduous campaign. Hurry is generally a mistake, but is doubly so when unnecessary. Men who have fought, and fought well, for their country deserve that every care should be taken of them. It is no economy to overcrowd a troopship, for the expenses incurred by the baneful results of such a process are sure to be, in the end, far above the expenditure necessitated by a proper and seemly arrangement. The transport organisation in connection with the war in South Africa has been the admiration of the civilised world, and it would indeed be a thousand pities if, for want of a little attention and forethought, such a brilliant achievement were marred at the eleventh hour.

Mummer Fever.

There is one thing with which the Indian Princes and the Colonial Premiers cannot fail to have been impressed with during their stay in England, and that is the exalted opinion entertained in official circles of our leading actors. As soon as the visitors had arrived, successively each actor-manager held his court, and the attendance of the nation's illustrious guests was most dutiful. This is all very pleasing, but we doubt if at any other period in the history of England, or anywhere else, even at the present day, a body of princes and statesmen visiting the country would have been expected to show such absorbing interest in stage personalities. This rush to the green-room may meet with the sagacious approval of young ladies in their teens, but brings a smile to the face of the average man of the world.

Nitrate of Silver in Ophthalmia Neonatorum.

Ophthalmic surgeons, as a rule, view with distrust the prophylactic treatment of ophthalmia neonatorum which was introduced by Crédé. Obstetricians, on the other hand, who have had practical experience of its value, consider it to be almost, if not entirely, trustworthy. It certainly has very greatly diminished the frequency of ophthalmia commencing during the puerperium, while it is more than likely that the cases of this disease which are seen in eye dispensaries in slightly older infants are due to a subsequent infection. Recent statistics which Runge has collected at Göttingen during the past five years show that one thousand new-born children were treated. Not one had an early infection of the eyes, and in only a single case was there a later infection, occurring at the beginning of the second week. Even in this case the infection ran a rapid and mild course—the inflammatory process disappeared in forty-eight hours. Including figures collected at Göttingen by Schallehn during a previous period, Runge is able to report 1,917 cases without a single early infection. On two separate occasions groups of pregnant women were examined at the Göttingen clinic for gonorrhœa. Of the first group, 25 per cent. were found to have infections; of the second group 20 per cent. were gonorrhœal; hence the opportunities for infection of the new-born were frequent enough. Runge regards the effectiveness of the Crédé procedure as unquestionable. A 2 per cent. silver nitrate solution does occasionally produce a mild conjunctivitis. A 1 per cent. solution has not this disadvantage, and is just as successful a disinfectant as the stronger solution.

Oil of Wormwood as an Abortefacient.

A recent inquest at Runcorn reminds us of the fact that oil of wormwood, or absinthe, in large doses does sometimes bring about abortion. The drug was obtained from a Liverpool chemist, who forwarded a quarter of an ounce of the drug in question to a certain village in answer to two separate orders received by letter. The drug was not scheduled as a poison, and was not usually regarded as a poison. A medical man found 103 grains of oil of wormwood in the stomach. In his opinion that amount was more than sufficient to cause death, and he regarded the stuff as a poison. The jury returned a verdict to the effect that death was due to an overdose of the oil taken with a view to procure abortion. They recommended in a rider that such a dangerous drug should be scheduled as a poison. The coroner stated that in his opinion it was most reprehensible for the chemist to have supplied such a drug without any directions as to the dose. It seems not altogether impossible that the police and the Pharmaceutical Society might have something further to say in the matter.

Romance of Poisoning.

Mr. Edgar Saltus has an article in the July number of *Harmsworth's Magazine* bearing the title: "The Romance of Poisoning: Beautiful Women and Accomplished Men who regarded Murder as an Art," which is necessarily interesting to all medical men. The author opens his communication with a characteristic twentieth-century sentence: "Poisons may be toxicoloquially catalogued as triply fascinating." And his reasons for this artistically-expressed opinion are given by him as follows: "Firstly, because of the mystery of them; secondly, because behind the mystery loom the great figures of the Borgias and the Brinvilliers; and, finally, because they involve the whole subject of murder considered as an art." There was a great deal of art, too, mixed up with the records of such transactions in the days when imagination reigned everywhere, and scientific doubt and scientific experiment were the most dangerous and most persecuted enemies of orthodoxy. The ring and poisoned needle of Pompeian antiquity, and long afterwards associated with Borgian reputation, by means of which "those who liked gave a little prick to those they did not like, and the latter fell dead"—have evaporated in the sunbeams of modern science. Such, we have been told, was the practice of Cæsar Borgia, who shook hands more energetically with his foe than his friend, by which action the minute, sting-like needle scratched the skin, and all was over this side the grave—for the victim. Very thrilling mythology that! It make the literature of the subject most attractive, especially to juvenile readers—particularly to those of the female persuasion. The "Aqua Tofania" possesses the historic merit of being a possibility. The judiciously-baptised "Poudre de Succession" runs on parallel lines. Some asserted that this important preparation consisted of ground glass. The poisoning and counter-poisoning of Sainte-Croix by the Marchioness of Brinvilliers and her husband make entertaining reading—of romance. There were many and artistic specimens of such romance prepared about the Courts of "Good Queen Bess" and "la Grand Monarque." Catharine de Medici and the Countess of Somerset scored high on this record of "romance."

The Annual Dinner of the Children's Society.

Among all the numerous learned societies connected with the medical profession none shows greater vitality and promise than the Society for the Study of Diseases of Children. Their annual dinner was recently held at the Hotel Cecil, when Dr. Henry Ashby, of Manchester, presided over a party of about a hundred members and visitors. The Honorary Treasurer, Mr. Clement Lucas, announced that Mr. Charles Wightman, Chairman of the Evelina Hospital, had offered the Society the sum of twenty pounds per annum for the purpose of encouraging original work. A number of capital speeches were given by Mr. A. H. Tubby, Dr. Page May, Dr. George Carpenter, Mr. Sydney Stephenson, and others. A novel feature in this kind of entertainment was the presence of several lay hospital governors, one of whom contributed a highly humorous speech. It is satisfactory to note that the funds of the Society are in a most satisfactory condition, taking into consideration the fact that the Society itself has hardly yet passed from the period of infancy into that of childhood.

PERSONAL.

Mr. Michael Henry Taylor, J.P., L.R.C.P.Ed., of Richmond, has been appointed Coroner for the Kingston division of the county of Surrey.

Dr. Sansom having resigned the Physiciancy, has been appointed Consulting Physician to the London Hospital, and has been unanimously elected by his colleagues a member of the London Hospital Medical Council.

Mr. R. Henslowe Wellington, M.R.C.S.Eng., has been appointed Deputy Coroner for the City and Liberty of Westminster, and for the South-Western district of London.

The monument raised to the memory of Professor Pasteur at his native town Dole, France, was inaugurated on Sunday by an imposing fête *au bienfaiteur de l'humanité.*

On the expiration of his term of office as President of the British Medical Association, Mr. Walter Whitehead, of Manchester, will be succeeded by Dr. J. D. Griffiths, of Swansea, at which place the next annual meeting will be held.

Mr. J. W. K. Mullen, L.R.C.P.I., Medical Superintendent of the Ladywell Sanatorium, has been presented by the nurses and servants of that institution with a study chair to commemorate his completion of twenty-one years' service thereat.

The resignation of Dr. Sansom leaves Dr. Stephen Mackenzie Senior Physician to the London Hospital. He has been obliged to winter in Egypt for the last two years. Should he be obliged to resign his post on account of his health, the medical side of the hospital would receive a serious loss in its teaching capacities.

Professor McHardy, of King's College Hospital, has had a narrow escape from drowning. From a newspaper report it seems during a recent gale in the Channel he fell overboard from a 10-ton yacht in which he was cruising with a friend. The latter went after him in a dinghy, and at length succeeded in getting him back on the yacht after a prolonged immersion.

THE BRITISH MEDICAL ASSOCIATION IN MANCHESTER.

The Manchester meeting, in spite of the autumn-like character of the weather and the lack of attractive features in the noisy, grimy, but enterprising city, has proved eminently successful. About fifteen hundred members are said to have attended. The majority, of course, came from the immediate neighbourhood. The number of foreign delegates was very small. Comparatively few ladies from distant parts of the country availed themselves of the opportunity of visiting this busy Lancashire centre. But Manchester is not a garden city and makes no claim to be a health resort. Mr. Walter Whitehead filled the office of President with grace and tact. The various committees have done their utmost to provide for the convenience and comfort of strangers. Much private hospitality was extended to visitors. The extensive buildings of the Owens College provided ample and excellent accommodation for the various sections. The entertainments and excursions were numerous and afforded much pleasure and delightful opportunities for renewing old friendships.

THE ANNUAL SERVICE AND SPECIAL ADDRESSES.

A special service was held in the Cathedral on Tuesday morning, July 29th, when an eloquent sermon was delivered by the Right Rev. Bishop Thornton, D.D., Vicar of Blackburn, from the text, "Neither shall there be any more pain, for the former things have passed away." A service was also held in the Church of the Holy Name, when the Rev. Charles Coupe, S.J., M.A., preached from "Honour a physician according to thy need of him, with honours due unto him."

Mr. Walter Whitehead delivered the Presidential address before a brilliant audience in the Whitworth Hall on Tuesday evening, July 29th, and dealt with Manchester's early influence on the advancement of medicine and medical education.

Sir Thomas Barlow's address (of which a full abstract will be found in another column) in Medicine was much appreciated, and ably sustained his contention that the study of the natural history of disease must afford the true basis for all advance in treatment.

Dr. Japp Sinclair gave the address in Obstetrics on "Carcinoma in Women," an abstract of which will be found on page 132.

THE SECTIONS.

No very startling discoveries or suggestive discussions can be credited to the Manchester meeting. Much that was interesting and excellent was brought forward in the seventeen sections, but nothing which can be regarded as epoch-making. The division into sections is desirable and necessary, but the tendency to specialise unduly is in many ways detrimental, and it must be admitted that the country practitioner and busy medical man of our towns and cities is unable to obtain a ready knowledge of the best work of the year by attending so sectionised a conference. Much needs to be done to reorganise the work of the Association as a serious scientific body. We consider it most desirable that at least a full abstract of everything presented in the sections should be made available to every member before the meetings. No paper or address should be allowed which has not first been printed in part or in whole. This might easily be arranged without seriously increasing expenses. At the present time there is undoubtedly a great need for concentration of thought and a more concise and precise mode of expression and certainly a more rigorous application of the time limit. It would be well also if opportunity could be given for clinical and practical demonstrations. It is interesting to note the growing number of medical women attending some of the sections. The discussions have gone far to show that in medicine there is "nothing new under the sun." In many instances the subjects selected were of not more than general interest.

In the Medicine Section Professor Clifford Allbutt opened a valuable discussion on the causes, diagnosis and principles of treatment of dilatation of the stomach, by a paper, a summary of which we print in another column; Sir William Broadbent, Professor Musser, of Baltimore, Dr. T. D. Savill, Dr. Harry Campbell, Dr. A. R. Parsons, Sir W. Mitchell Banks and others took part in the discussion.

Dr. N. Bardswell contributed an interesting paper on dilatation of the stomach in cases of pulmonary tuberculosis. Professor Carl von Noorden dealt with the dietetic treatment of chronic granular kidney. A discussion on the differential diagnosis of functional and organic paralysis was opened by Dr. Buzzard. Numerous papers were presented. A special feature of this section were demonstrations of clinical apparatus and methods of research. Clinical cases were also shown. Mr. Hastings Gilford had an excellent exhibition of photographs illustrating infantilism and senilism.

In the Surgery Section the treatment of inoperable cancer gave rise to a very interesting discussion. Mr. Henry Morris, in a very comprehensive paper, opened the subject, and considered the relative advantages of operative procedures, toxin treatment as by Coley's fluid, injections of cancroin, cholesterine with soap, Beatson's method of oophorectomy combined with thyroid feeding, and physical applications such as Finsen light, X-rays, and high-frequency currents. Mr. Thomas Bryant, Dr. Beatson, Professor Wild, Mr. Jessett, Dr. Herbert Snow and others took part. The discussion on the treatment of tuberculous disease of the testis vesiculæ seminales, prostate, and bladder was very ably opened by Sir Thomas Myles and Professor Senn, and Messrs. Edmund Owen, Rutherford Morrison, and Jordan Lloyd were among those who took part. A number of important papers were presented.

In Obstetrics and Gynæcology Dr. Galabin opened the discussion on Cæsarean section, and Dr. Berry Hart on the operative treatment of prolapsus uteri. Many valuable papers were also read.

The Public Medicine Section offered a most attractive programme, including such matters as vaccination, return cases of scarlet fever, the prevention of tuberculosis, arsenical poisoning, and the relation of poverty to disease.

The Psychological and Anatomical Section was naturally very select, but dealt with matters of much importance. Sir John Sibbald opened the discussion on the treatment and care of persons in the early stages of unsoundness of mind. Dr. Mott dealt with the influence of syphilis as a cause of insanity.

In the Physiology and Anatomy Section Dr. Berry Hart opened a valuable discussion on the development of the human genito-urinary organs.

In the Pathology Section Dr. Frederick Mott dealt with the pathology of nerve degeneration, and Professor Sims Woodhead opened a discussion on the place of bacteriological diagnosis in medicine. The relationship of human and bovine tuberculosis was discussed by Professor Hamilton, and that of fœtal bone disease by Dr. Ballantyne and Dr. Stoeltzner at a joint meeting of this section with that devoted to diseases of children.

The Section on Ophthalmology dealt with the treatment of sclero-keratitis, functional derangements of the eye, and the rarer forms of optic atrophy. Many papers were also presented.

In the Section on Diseases of Children the discussion opened by Professor Rotch, of Harvard University, on the modified milk aroused much interest. Considerable attention was given to the question of the treatment of mentally feeble children, and an exciting discussion took place over the value of physical exercises in disease of the respiratory tract.

In Laryngology the question of foreign bodies in the upper air passages received attention, and much discussion ensued on the ultimate results of radical operations on the maxillary and frontal sinuses. A joint discussion with the section on otology took place on the ætiology and treatment of ethmoidal and sphenoidal suppuration.

The Section on Otology discussed the aims and limitations of intra-nasal surgical procedures in the treatment of chronic non-suppurative middle-ear disease, and the indications for and against ligation of the internal jugular vein in cases of otitic pyosepticæmia. Numerous papers were also considered.

In the Dermatological Section a valuable discussion took place on radiography, X ray treatment, high frequency currents, and light treatment.

In the Section on Pharmacology Sir Lauder Brunton opened a discussion upon the undesired and unexpected actions of medicines, including tolerance and idiosyncrasy to or abnormal results from ordinary doses. The therapeutic value of arsenic was also considered.

Much good work of a somewhat technical character was accomplished in the Section dealing with industrial hygiene and diseases of occupation. Dr. John Shoemaker, of Philadelphia, took an active part in the discussion in this Section.

The Section on Ethics proved a safety valve for iconoclastic progressives and enthusiastic reformers, and many vigorously-worded resolutions were submitted. Such burning questions as contract practice, medical education, hospital reform, medical organisation, and vaccination aroused warm discussion.

Much quiet but good work was also done in the sections devoted to Navy, Army and Ambulance, and Tropical Diseases.

We regret that lack of space prevents our giving a detailed account of the proceedings, but abstracts of many of the more important contributions we are providing for our readers:

THE PATHOLOGICAL MUSEUM.

A small but interesting collection of drawings, photographs, and specimens were shown in the pathological laboratories. A useful catalogue had been compiled by Dr. Moore. Among the more important preparations were those of Dr. Stoeltzner, illustrating fœtal and infantile bone disease; Mr. G. A. Wright, showing changes in tuberculous disease of the hip; Mr. Noble Smith's plates of congenital displacement of the hip-joints; Drs. Orr and Rows, specimens of nerve-cells of spinal root ganglia. Mr. Southam showed an interesting series of fifty cæcal appendices; Dr. Chalmers Watson exhibited photographs illustrating some results of an experimental research on the comparative pathology of gout. Prof. Delepine showed photographs of lesions found in patients and rats suffering from chronic arsenical poisoning; and Mr. Jonathan Hutchinson had sent some valuable portraits admirably indicating the characteristics of arsenical keratosis and arsenical cancer. Mr. Westmacott made a good show with his preparations illustrating the anatomical characters of the nasal cavity and accessory sinuses.

It is to be regretted that more of the very valuable material locked up in the Pathological Museum of the Owens College was not made accessible to members.

A special feature was the very interesting collection of drawings which Mr. Hutchinson had selected from those added to the London Polyclinic Museum during the past year. It would add much to the value of the annual pathological show if Mr. Hutchinson's example could be followed by workers throughout the country.

SPECIAL EXHIBITIONS.

It is to be regretted that the various departments of the Medical School of Owens College did not arrange for exhibitions of apparatus and materials connected with their special work. Professor Stirling was, however, an exception, and provided an excellent and most interesting exhibit of some illustrated classics, specimens illustrating the methods of teaching physiology, tracings, and physiological apparatus.

Mr. Hastings Gilford exhibited a series of pictures and photographs illustrating infantilism and senilism.

There was also a special photographic exhibition, but the majority of the exhibits were of no medical interest.

THE HANDBOOK AND GUIDE.

The volume presented to members and prepared under the directions of Mr. Ray is deserving of high praise. It forms a handsome, admirably illustrated work of over 200 pages. Almost all features concerning Manchester and its immediate neighbourhood receive consideration. The section dealing with the Manchester Medical School has been written by Professor Stirling, while the medical charities are described by that veteran physician Dr. Renaud.

ENTERTAINMENTS AND EXCURSIONS.

Although Manchester is by no means an ideal situation for a picnic, and in spite of much that was unsatisfactory in last week's weather, the festive, frivolous, and social side of the annual gathering has been perhaps more successful than the purely scientific. Numerous garden parties have taken place. Special mention may be allowed to that of Mrs. Rylands, the munificent founder of the far-famed Rylands' library, where the company was much charmed with the pastoral play provided by members of Mr. Benson's Shakespearean Company. Another worthy of note was that given by Dr. and Mrs. Mould at the Royal Asylum, Cheadle.

During the week interesting excursions took place to Blackpool, Crewe, Northwich, Bury and other centres. The evenings were devoted to entertainments which took the form of a soirée at Owens College, an illuminated fete at Whitworth Park, a variety entertainment at the Prince's Theatre, a conversazione at the Art Gallery, and a reception at the Town Hall.

The annual dinner was provided in a specially-erected marquee, which also afforded somewhat novel accommodation for a ball, which concluded a most enjoyable and successful gathering.

Saturday, August 2nd, was given up to excursions to Chatsworth and Haddon Hall, Southport, Windermere, Lancaster, Chester, Colwyn Bay and Conway, Llanberis, Snowdon and Carnarvon, which however were much marred by unfavourable weather.

SOCIETY MEETINGS.

During the week various important gatherings took place in connection with different societies. Thus meetings were held in the interests of the New Sydenham Society, the Irish Medical Schools and Graduates' Association, the Police Surgeons' Association, and the British Electro-Therapeutic Society. Members of the Anglo-American Continental Medical Society lunched together. An international golf match was also held. A number of Manchester clubs extended the use of their premises to members of the Association.

MANCHESTER HOSPITALS.

The various hospitals were open for inspection during the week.

The Royal Infirmary is an antiquated and altogether inadequate building, and most of the Manchester hospitals are lacking in many of the desirable modern features. Even the new St. Mary's Hospital for Women and Children has been built on a particularly unsuitable site. Manchester has but little to teach in regard to hospital construction and much to learn.

The general arrangements for the convenience of visitors were on the whole very good. The accommodation for ladies might have been improved with advantage, and that for representatives of the Press very deficient. At the general meetings a number of undergraduates in their becoming gowns did good service as stewards. It may also be noted that the Manchester papers gave great prominence to the work of the Association.

ASSOCIATION NOTES.

On Monday evening, July 26th, Mr. Walter Whitehead entertained a number of guests at dinner at the Albion Hotel.

Sir Thomas Barlow, the deliverer of the address in medicine, is claimed by Manchester men as an old Lancastrian and former student of Owens College.

The Lord Mayor of Manchester has taken an active part in welcoming the members of the Association to the city of which he is chief magistrate.

The works of the Corporation, the Ship Canal, many factories, and other places of local interest have been freely thrown open to members.

Among the foreign guests were such well-known men as Professors Babinsky and Liebreich, of Berlin; Von Noorden, of Frankfurt; Ludwig, of Munich; Musser and Anders, of Philadelphia; Northreys, of New York; Onodi, of Budapest; Pepper, of Philadelphia; and Rotch, of Boston.

The purely business meetings were almost devoid of interest. Mr. Francis Fowke, general secretary of the Association for thirty-one years, has resigned and been accorded the honour of honorary membership for his distinguished services. Mr. Guy Elliston has been appointed his successor. Mr. Andrew Clark has been appointed Chairman of Council. Dr. Markham Skerritt, of Bristol, has been appointed the new Treasurer of the Association.

Sir Victor Horsley, F.R.S., presided over a largely attended breakfast on Thursday, July 31st, given by the National Temperance League. Professor Sims Woodhead and others took part.

The annual meeting for 1903 is to be held in Swansea, and Dr. Thomas Dryslwyn Griffiths is President-Elect.

In connection with the museum we may express a hope that in future the custom of "showing" specimens of whiskey may be stopped, and the American method of touting their goods ameliorated.

It is to be hoped that under its new constitution the British Medical Association will not only extend its usefulness to members, but will do much to maintain the dignity and position of the profession throughout the Empire.

THE EXHIBITION OF DRUGS, INSTRUMENTS, &c.

The exhibits on the present occasion were exceptionally large and varied, Manchester itself having contributed a not inconsiderable share. The exhibition was held in the Drill Hall, near to Owens College, of which we propose to give a brief description in our next issue.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

The Medical Guild and the Meeting of the British Medical Association.

The preparations for the great meeting have culminated in what our visitors have been kind enough to describe as a brilliant success. Everyone has behaved well with the exception of some person or persons unknown who had the bad taste to distribute copies of the *Medical Guild Quarterly* within the Owens College to those who attended the President's Address and the Soirée which followed it last Tuesday evening. Ladies and laymen were present in large numbers, and the occasion and place were hardly suitable for the perusal of medico-political "illiterature." The editor of the *Quarterly* remarks in the current number:—"Indifference or dislike to be associated with certain other members, or an objection to the fetters of any combination, must be the causes that keep men outside the Guild." The men who have been kept outside the Guild and who have recently left it, would appear to have displayed good judgment, although the editor maintains that "From the Guild has emanated an unseen influence that has worked for all that is noble, true, and honourable in the profession." He more truthfully continues: "The Guild has a greater work before it in the future than it has accomplished in the past.

The business of the Guild at its last quarterly meeting appears, from the report in its journal, to have been the passing of a resolution censuring the much discussed pamphlet signed by the medical staff of the Manchester Maternity Hospital. The distribution of this report at a function where laymen and ladies were present, was surely a blow so much below the belt as to be unworthy even of warriors in medico-political warfare. The report of the June meeting of the council of the Guild contains a reprint of an advertisement published in the *Manchester Guardian* on behalf of the authorities of the Owens College. This seems to have exercised the fourteen councillors present, because the names of two distinguished physicians were mentioned in connection with two post-graduates courses which were announced. The secretary of the Guild was requested to communicate with the two physicians upon the subject. Their answers to his communications will be worth reading—if indeed they answer them at all. The Guild is indeed fallen low when it not only insults the Owens College, but goes the length of distributing copies of the insult to the foreign, colonial, and other visitors of the College, actually within the walls of the College.

On a well-known estate in Scotland the proprietor had the words "Thou God seest me" printed on notice boards, instead of the more usual "Trespassers will be prosecuted." He did not shoot, nor did his visitors, so that the absence of game from his estate did not seriously inconvenience him. The unseen silent guiding hand of Conscience seems to pull too lightly on the strings that move the Medical Guild. This being so, a little unpleasant notoriety may help the "unseen influence" that "emanates" from the Guild to mind its own business more successfully, and leave alone "all that is true and noble and honourable in the profession."

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

Medico-Psychological Association of Great Britain and Ireland.

The sixty-first annual meeting of this Association was held at the Medical Institution, Liverpool, on Thursday and Friday, July 24th and 25th, under the presidency of Dr. J. Wiglesworth, Rainhill. At the commencement of the meeting Dr. Sydney Coupland, M.D., F.R.C.P., Commissioner in Lunacy, London, and Dr. Edward N. Bush, M.D., Medical Superintendent of the Sheppard

Pratt Hospital, Towson, Maryland, were unanimously elected honorary members of the Association.

Dr. Wiglesworth, in a comprehensive and interesting address, dealt specially with some of the problems of heredity in regard to mental diseases. It was impossible to take all the cases that had come under his care, yet he quoted figures dealing with heredity and insanity during the last twelve years, and out of 3,445 cases definite hereditary taint had been found in 965. Females showed a higher percentage than males, and the mother had a greater tendency to transmit insanity to her female offspring than to her male. Alcoholism was a fruitful cause of insanity, incompatibility of parents another, and, he went on to say, if any advance was to be made in the improvement of the race it must be by a recognition of the enormous importance of the subject by parents and guardians, as well as by young people.

Mr. Damer Harrison read a paper, "Some Remarks upon the Surgical Treatment of Insanity," and enumerated a number of cases in his own experience which had been treated surgically with success. The Chairman congratulated him on the brilliant results he had achieved.

Dr. Mercier proposed the following resolution "That in the opinion of this Association further legislative measures are needed to protect the property of those who, without being certifiably insane, are yet, by reason of disorder of mind unable to administer their affairs with ordinary prudence." His object, he said, was to get legislation on this important subject embodied in the new Lunacy Act. The absolute number of cases was not large, but still it was sufficiently so to justify legislation, and in the individual cases that had come under notice the hardship and misery produced was very great indeed. The important point was what remedy were they to recommend. Dr. Mercier's remarks were followed by a speech on the same subject by Mr. Percy Becher, solicitor, London, in the course of which he stated that continental countries recognised the fact that there existed a class of people, who, without being exactly of disordered intellect, nevertheless stood in need of some help and some protection in the management of themselves and their affairs. He was of opinion that legislation should not be under the Lunacy Department so that people, who, either voluntarily or by order of the court, had their affairs taken out of their hands should not be branded as lunatics. A discussion followed, and the resolution was subsequently passed.

Dr. F. W. Mott contributed a paper entitled "Stimulus in Relation to Decay and Repair of the Nervous System." The paper was illustrated by lantern slides and diagrams, and Professor Sherrington, Dr. W. B. Warrington, and others took part in the discussion that followed.

Dr. A. W. Campbell and Dr. David Orr each gave a lantern demonstration on the medullated nerves fibres of the cerebral cortex, and nerve-cell and medullated fibre changes in acute insanity, respectively.

Dr. T. S. Clouston introduced a discussion upon "The Possibility of Providing Suitable Means of Treatment for Incipient and Transient Mental Diseases in our great General Hospitals," in which, amongst others, the following eminent authorities took part:—Sir John Sibbald, Drs. Wiglesworth, Hayes Newington, Mercier, Rayner, Savage, Hyslop, Yellowlees, Percy Smith, and Urquhart.

A paper on "Medico-Psychological Statistics—the Desirability of Correlation with a View to Collective Study," was read by Dr. Hubert C. Bond; and Dr. W. R. Dawson read "Notes on the Pathology of Diabetic Insanity."

The annual dinner of the Association was held on the Thursday evening at the Adelphi Hotel, Dr. Wiglesworth presiding. The toast of "The Medico-Psychological Association" was given by Mr. W. Scott Barrett and acknowledged by the President, who remarked that the Association was making steady progress, although it might be slow, and that never before had the membership been so numerous, nor had it ever possessed so much vitality. The toast of "The Liverpool University College" was proposed by Dr. Savage and responded to by Professor Sherrington. Dr. Yellowlees gave "The Medical Profession of Liverpool," to which Sir William Mitchell Banks replied. The concluding toast, "The Guests," was proposed by Dr. Clouston and acknowledged by Sir E. R. Russell, Dr. Brush (Baltimore), and Mr. Edgar Browne.

Dr. Wiglesworth, the President, and Mrs. Wiglesworth kindly invited the members to a garden party on the Saturday following the meeting at Rainhill Asylum, near Liverpool.

LIVERPOOL SCHOOL OF TROPICAL MEDICINE.

THE Liverpool School of Medicine under the able and generous guidance of its enthusiastic chairman, Sir Alfred Jones, invited the tropical section of the British Medical Association to dinner on Friday at the Adelphi Hotel with the Duke of Northumberland as their guest. Among those present we observed the Bishop of Liverpool, Sir Wm. Macgregor, K.C.M.G. (Governor of Lagos), Sir George Denton, K.C.M.G. (Governor of Gambia), Sir Wm. Kynsey, C.M.G., Sir Wm. M. Banks, Sir Ed. Russell, Major Ronald Ross, C.B.; Professors Clifford Albutt, Chiene, Madden, Sherrington, Boyce, and Rushton Parker; Drs. Stoeltzner, Manson, C.M.G., Daniels, Carter, Dawson, Adams, &c., &c.

After the toast of "The King" the Chairman proposed "The Duke of Northumberland," remarking that "our" distinguished guest had encouraged the promotion of a Tropical School of Medicine in its infancy, as his presence that night proved. Tropical medicine must benefit every nation of the world, and England was glad to combine with other nations in making life in the tropics more salutary. Liverpool, he thought, had come to the front in this matter, and his Grace was not without merit in this success, as he had rendered substantial aid in their first efforts.

The Duke, responding, said he was deeply impressed with the importance of ameliorating tropical existence, as we had large tracts of land almost uninhabitable at present. What the possibility of our future would be if these districts were made salubrious time alone would solve. The warrior, colonist, and diplomatist had done their several duties in the past, but it yet remained for medical science to complete the victory. He congratulated Liverpool on its magnificent school of medicine, more especially its youngest and most vigorous branch, which had a brilliant future before it. It was also pleasing to see the commercial generosity extended to it by business men, who were not wholly disinterested in the development of these barren possessions. It was satisfactory to know that the institution had sent out six or seven expeditions to various parts of the world, whose devotion he admired in facing such dangers in the cause of humanity. Personally, he owed a debt of gratitude to Major Ross who first awakened his own interest in the subject by a lecture he gave at the Royal Institution, over which he presided.

The Bishop of Liverpool next proposed "Tropical Medicine," to which Sir Wm. Kynsey responded.

Dr. Manson believed that all countries could be made healthy when the true cause was known and expense ignored. He deplored the lack of financial support these noble institutions suffered from, and believed that the investigations carried on in London and Liverpool must ultimately bear good fruit. Malaria was not the only disease, as many others existed of which we were perfectly ignorant, as he had seen to-day in the Liverpool School a discovery by Dr. Dutton which was the probable cause of a hitherto unknown tropical disease, and was of infinite scientific importance. He was in favour of a Government department that included tropical medicine as well as the education of the natives of the country, showing them how to cure and prevent the disease.

Professor Clifford Allbutt described work done at Cambridge and other Universities.

The Chairman proposed "Our Tropical Colonies," and offered medical men, with his usual generosity, free passes and free access to all their stores on the coast if they would only take this matter in hand. After a few remarks by his Excellency Sir Wm. Macgregor, K.C.M.G., and Sir G. C. Denton a very instructive evening was concluded with a cordial vote of thanks to Sir Alfred Jones for his handsome reception.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

SUNSTROKE AND DIETARY.

To the Editor of The Medical Press and Circular.

Sir,—The "microbic" explanation of sunstroke is by no means a clear solution of the problem of its incidence, and therefore while I quite agree with your characterising the claim of the man who went about for a few hours in the hot sun and escaped sunstroke because he was "a vegetarian" as being faddist nonsense, yet the relation of food and drink to such curious diseases as sunstroke is worthy of more than passing comment.

I was very much struck in India with the fact that men and women of the poorer classes, with their cranial bones and smooth fine hair brushed close down to the head, went about in the fierce sun with impunity at times when well-fed Indians and Europeans found it necessary to carry an umbrella as well as a sun helmet.

Their almost complete abstention from alcohol, the small amount of fluid they drank, and the sparing simplicity of their dietary had some share in this result, for it was just in these points that they differed from those who found the heat more dangerous.

Abstinence from flesh food alone certainly could not claim the credit, because Mahomedans and Rajpoots as well as Hindus of the flesh-abstaining castes seemed equally immune.

Is it not equally instructive to note that animals in their natural hardy state seldom die of sunstroke, whereas, among those animals such as highly-fed horses, that have had much fluid food, we find most cases of death from this cause.

Where the tissues are over-full of fluid one can understand that they would be likely to be more readily affected by extreme heat variations than when they were in a drier and harder condition.

From this point of view, both fruitarianism and total abstinence are good, in so far as they encourage habits of drier feeding and less fluid imbibition.

I am, Sir, yours truly,
Josiah Oldfield, D.C.L., (Oxon.), M.R.C.S.E.
Harley Street, W., August 2nd, 1902.

[We fail to see on what grounds does Dr. Oldfield assert that sunstroke is common in horses. The theory about fluid food is purely conjectural, and simply substitutes water for vegetables as a preventive of suntroke.—Ed.].

Royal College of Surgeons in Ireland.

The following scholarships and prizes have been awarded for the summer session, 1902:—

Barker Anatomical Prize: £30, R. G. Allen.

Carmichael Scholarship: £15, J. J. Connolly.

Silver Medals in Operative Surgery: W. R. Ormsby and J. J. Ryan (equal).

Practical Histology: W. W. Boyce, First Prize, cheque and medal; A. C. Adams, Second Prize, cheque and certificate.

Practical Chemistry: C. M. Burton, First Prize, cheque and medal; J. B. Kelly, Second Prize, cheque and certificate.

Public Health and Forensic Medicine: F. O'D. Fawcett, First Prize, cheque and medal; L. F. Kelly, Second Prize, cheque and certificate.

Materia Medica: P. V. Dolan, First Prize, cheque and medal; H. S. Misstear, Second Prize, cheque and certificate.

Practical Pharmacy: C. M. Burton, First Prize, cheque and medal; R. J. Smallman, Second Prize, cheque and certificate.

Biology: C. M. Burton, First Prize, cheque and medal; A. J. Faulkner, Second Prize, cheque and certificate.

The schools of surgery will resume work after the summer recess, October 1st.

Odontological Society of Great Britain

The following office-bearers have been elected for 1902-1903: President: William A. Hunt. Vice-Presidents: (Resident) F. J. Bennett, W. H. Woodruff, E. G. Betts. (Non-Resident): W. S. Woodburn, Glasgow; W. B. Bacon, Tunbridge Wells; H. B. Mason, Exeter. Treasurer: C. F. Rilot. Librarian: H. Baldwin. Curator: J. F. Colver. Editor of Transactions: H. Lloyd Williams. Honorary Secretaries: J. H. Mummery (Foreign), W. Rushton (Council), Montagu F. Hopson (Society). Councillors: (Resident) R. Wynne Rouw, J. Mansbridge, Morton A. Smale, R. Dennison Pedley, J. Percy Smith, George Hern, A. Hopewell-Smith, E. Preedy, Carl Schelling; (Non-resident): G. O. Whittaker, Manchester; W. A. Rhodes, Cambridge; W. Glaisby, York; J. J. H. Sanders, Barnstaple; E. A. Bogue, New York; J. F. L. Pike, Sheffield; G. W. Watson, Edinburgh; Kevin E. O'Duffy, Dublin; John E. Grevers, Amsterdam.

The Conjoint Board of Scotland.

The following candidates have passed the respective examinations by the Royal College of Physicians of Edinburgh, Royal College of Surgeons of Edinburgh, and Faculty of Physicians and Surgeons of Glasgow:—

First Examination (five years' course).—Of twenty-nine candidates entered the following eight passed the examination: Horace Moody, Angus Cameron Mackay, Eleanor Margaret Thompson, Thomas Mayne Reid Waddell, Thomas McLaren Galloway, William Barclay, Thomas Wren Faulkner (with distinction), David James Melville Legge, and four passed in physics, six in elementary biology, and four passed in chemistry.

Second Examination (four years' course).—Of six candidates entered the following three passed the examination: Charles Joseph Sutton, Edward Henry Smyth, and John William Duncan.

Second Examination (five years' course).—Of twenty-nine candidates entered the following seventeen passed the examination: Alan Cunliffe Vidal, Ernest Patrick Titterton, Tom Newman Darling, William Montgomery Johnston, Joseph Millar Gordon Ewing (with distinction), John Samuel McLean, Colin Garner, Bertram Ingram, Robert Percy Hosford, Henry Alexander Hagenauer, James Sullivan (with distinction), Charles Stewart Parnell McDermott, Ayodeji Oyejola, Michael Philip Desmond, John Macmillan Campbell (with distinction), James Young (with distinction), and Henry Edward Bolton, and two passed in anatomy.

Third Examination (five years' course).—Of thirty-two candidates entered the followning twenty-one passed the examination: Jehangir Horsnasji Contractor, Arthur Joseph O'Leary, Thomas Bunnett Lewers, Rupert Allen Clayton Rigby, Peshotan Ratanji Sataravala, Hubert James George, Edward Rainsford Mumford, Lilian Mary Grandin, Sybil Lonie Lewis, George Morley Arundel Thomas, Joseph Stark Forth (with distinction), William Herbert Boalth, Jamshed Dadabhai Munsiff, John St. Aubyn Maughan, Broderick Edward Middleton Newland, Edward Percy Airth Richardshon, John O'Brien, Elizabeth Mary Cardozo, William Lang Hodge, John Joseph Lawton, Robert David Hirsch, and one passed in Materia Medica.

Final Examination.—Of sixty-nine candidates the following thirty-seven passed the examination, and were admitted L.R.C.P.E., L.R.C.S.E., and L.F.P.&S.G.: James Campbell MacLean, Charles Isaacs Levey, Frederick Llewellyn Thomson, M.D., John William Isbister, Sophia Frances Hickman, David Moodie, Frederic John Scrimgeour, Robert Bathgate Johnston (with honours), Philip Gray-Marshall, May Thomson, Robert Douglas Argyll Douglas, Peter Mohan, Henry Anderson Lunn, William Bates, Donald Grant, William Samuel Rainey Dick, Arthur John Beardmore, Tithal Narayan Patwardhan, Harold Raby Parkinson, Robert Patrick Hal Blackstock, William John Gray, William James Noble Todd, L.D.S., Shanker Bhawoo Kulkerni, Mutyala Sriramulu Naidu, Lewis Pemberton Anderson, Percy Howe, Joseph William Sutton, Pandit Devi Dayal Sasun, Khubchand Menghraj Manghirmalani, William Deery, Henry Graham Arnott, M.D., Hirabai Furdoonji Banaji, Alexander Watson Hart, John Buckner, William Gregory Neill Keith, St. Clair Grahame Ballenden, and John Walker Wood; and five passed in Medicine and Therapeutics, one in Surgery and Surgical Anatomy, six in Midwifery, and seven in Medical Jurisprudence.

Notices to Correspondents, Short Letters, &c.

☞ **Correspondents** requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c, Much confusion will be spared by attention to this rule.

Our Paris correspondent's letter arrived too late for insertion this week.

X-Ray Photographer (Tunbridge Wells).—The essence of the whole thing is slow development. There is no advantage in having specially rapid plates. Any good quick plate may be used, but as the development is slow the greatest care must be taken with regard to the light used in the dark room. Indeed, it will be far the safer plan to carry on the process as far as possible in absolute darkness. All X-ray plates may be regarded as over-exposed.

THE KELTY CASE.

To the Editor of The Medical Press and Circular.

Sir,—I have read in your issue of July 30th a short report of this case to recover balance of the price of a good will of a medical practice. I am surprised that such an action should have been necessary; it has been decided in a still higher court that these contracts are not capable of being made the subject of "decrees for specific performance." But the doctors as a *class* are gainers by the decision before the Lord Chief Justice.

I am, Sir, yours truly,

An Observer.

Theodore F.—The gentleman you mention is usually positive in his opinions, but it by no means follows that he is always right. Indeed, many who are qualified to judge maintain that the reverse is very often the case. We should advise you in your relation to patients to steer as far as possible a middle course. Where your mind is made up as the result of careful investigation and weighing of facts, say so clearly and firmly. Be cautious, however, when your statement is founded, as it necessarily must often be, upon empiricism pure and simple. Study the writings of a man like Paget if you wish to master the art of reasoned statement with an absolute regard to its value relative to the fulness of the underlying basis of ascertained facts. Keep a few guiding principles in view, and in the course of time you will find the methods of clear reasoning and clear expression will become a kind of second nature.

MURPHY'S BUTTON.

To the Editor of the Medical Press and Circular.

Sir,—May I trouble you for the favour of a line in your next issue stating who is the Murphy whose name is attached to the phrase "Murphy's button?" and oblige,

Yours respectfully,

One of the Same Name.

[The Murphy whose name is given to the famous "button" used in intestinal anastomosis is an American surgeon, whose full name and description our correspondent will with this clue have little difficulty in ascertaining.—Ed. Medical Press and Circular.]

Appointments.

Broadbent, John, M.A., M.D.Oxon., M.R.C.P.Lond., Assistant Physician to the London Fever Hospital.

Burton, Arthur, M.D.Cantab., Certifying Surgeon under the Factory Act for the Cromer District.

Cox, Ernest A., M.R.C.S., L.R.C.P.Lond., Public Vaccinator for the No. 4 District of the Daventry Union.

Davies, Joseph, F.R.C.S, L.R.C.P.Edin., L.F.P.S.Glasg., J.P., Deputy Medical Officer of Health of Swansea.

Gibson, William, M.B., Ch.B.Glasg., Medical Officer of Health to the Cheadle Rural District Council.

Gough, John Harley, F.R.C.S.Edin., L.R.C.P.Lond., M.R.C.S., Honorary Physician to the Torbay Hospital, Torquay.

Harratt, T. T., M.R.C.S., L.R.C.P.Lond., Medical Officer of Health of Rye.

Haworth, E., M.B., M.S.Glasg., Medical Officer of Health for Oswaldtwistle.

Hopewell-Smith, A., L.R.C.P.Lond., M.R.C.S., L.D.S.Eng., Lecturer on Dental Anatomy and Physiology at the Royal Dental Hospital of London.

Hunt, Ernest, L.R.C.P Lond., M.R.C.S., Medical Officer for the Kingsteignton District by the Newton Abbot (Devon) Board of Guardians.

Long, Sydney Herbert, M.B., B.C.Cantab., Medical Officer of Health to the St. Faith's Rural District Council.

Matthew, Edwin, M.A., M.B., C.M.Edin., Assistant Physician to the Leith Hospital.

Meredith, R. William Henry, L.R.C.P.Lond., M.R.C.S., Medical Officer for the No. 1 District by the Wellington (Somerset) Board of Guardians,

Pipette, Walter, L.R.C.P.Edin., L.R.C.S.Edin., L.S A., Medical Officer for the No. 1 District by the Bridgwater Board of Guardians.

Pollock, John Robert Russell, L.R.C.P.Lond., M.R.C.S., Medical Officer of Health of the Tiverton (Devon) Rural District.

Scott, James Andrew Neptune, M.D.Glasg., Health Officer for the Shire of Wycheproof, vice Dr. Ralph Charles Brown.

Seccombe, J. W. S., M.R.C.S., L.R.C.P.Lond., House Physician to St. George's Hospital.

Talbot, Francis T., M.B., B.C.Cantab., M.R.C.S., L.R.C.P., Surgeon to the Stockton and Thornaby Hospital.

Tate, Isobel A., M.B., B.S.R.U.I., Resident Assistant Medical Officer at the Union Workhouse, Burnley.

Taylor, M. H., J.P., L.R.C.P., L.R.C.S., Coroner for the Kingston District of Surrey.

Toye, E. J., M.D.Lond., Medical Officer of Health to the Northam (Devon) Urban District Council.

Valentine, W. A., M.D.Univ. Dublin Trin Coll., District Medical Officer and Public Vaccinator of the Northam District of the Bideford Union.

Wellington, R. H., L.R.C.P.Lond., M.R.C.S., Deputy Coroner for the City and Liberty of Westminster and for the South-Western District of London under the London County Council.

Williams, Penrose Lanyon Watkin, L R.C.P.Lond., M.R.C.S., Medical Officer to the Bridgwater Workhouse.

Vacancies.

Belmullet Union.—Bangor Dispensary District. Medical Officer. Salary £100 a year, with Vaccination Fees, &c., and £10 a year as Medical Officer of Health. Applications to E. N. Flynn, Clerk of Union. (See Advt.).

Birmingham General Dispensary.—Resident Surgeon. Salary £150 per annum (with an allowance of £30 per annum for cab hire) and furnished rooms, fire, lights, and attendance. Applications to Ernest W. Forrest, Secretary.

Cornwall County Asylum, Bodmin.—Junior Assistant Medical Officer. Salary £130, rising to £160, with board, furnished apartments, laundry, &c. Applications to the Medical Superintendent.

Dundee Sanatorium for Consumption.—Medical Superintendent. Salary £250 per annum. Applications to Thos. Thornton, Hon. Secretary, City Chambers, Dundee.

Gorey Union.—Medical Officer of the Workhouse Fever Hospital. Salary £100 a year. Also a Medical Superintendent Officer of Health for the Rural District. Salary £20 a year. Applications to R. Creighton, Clerk of the Council. (See Advt.)

Halifax Union Poor-law Hospital.—Resident Medical Officer. Salary £130 per annum as Resident Medical Officer and £20 per annum for Dispensing, with apartments, rations, and washing. Applications to Arthur T. Longbotham, Solicitor and Clerk to the Guardians, 4, Carlton Street, Halifax.

Haydock Lodge Asylum, Lancashire.—Assistant Medical Officer. Salary to commence at £175 a year, with furnished quarters, board, washing, &c. Applications to Dr. Street, Haydock Lodge, Newton-le-Willows, Lancs.

Jenner Institute of Preventive Medicine.—Assistant Bacteriologist for the Serum Department at Aldenham. Salary £200, with furnished rooms. Applications before September 1st. (See Advt.)

Nottingham General Dispensary.—Senior Resident Surgeon. Salary £200 per annum. Furnished apartments, attendance, light, and fuel are provided. Applications to Secretary, Martin Snell Preston, Journal Chambers, Nottingham.

Newport and Monmouthshire Hospital.—House Surgeon. Salary £100 per annum, with board and residence. Applications to the Secretary.

Rotherham Hospital and Dispensary.—Senior House Surgeon. Salary £110 per annum. Applications immediately to the Secretary, E. S. Baylis, 19, Moorgate Street, Rotherham.

Royal Lancaster Infirmary.—House Surgeon. Salary £100 per annum, with residence, board, attendance and washing. Applications immediately to the Secretary.

Tullamore Union.—Philipstown Dispensary District. Medical Officer. Salary £100 a year, together with Vaccination Fees. Applications to E. J. Graham, Clerk of the Union. (See Advt.)

Births.

Baly.—On July 27th, at Goldhurst Terrace, South Hampstead, the wife of C. F. Peyton Baly, M.R.C.S., L.R.C.P., of a daughter.

Phillips.—On July 29th, at 74, Carlisle Street, Cardiff, the wife of J. A. Philips, surgeon, of a daughter.

Turney.—On August 1st, at 68, Portland Place, London, W., the wife of H. G. Turney, M.D., of a daughter.

Marriages.

Griffith—Tweedie.—On July 30th, at Christ Church, Edinburgh, William Starbuck Griffith, M.B., Milford Haven, to Ada Mabel, second daughter of Charles Tweedie, late of Jessore, Bengal.

Hare—Lockwood.—On July 30th, at Christ Church, Linnet Lane, Liverpool, Alfred William Hare, M.B., Ch.B., youngest son of the late Humphrey J. Hare, of Chatham, to Laura Margaret, only daughter of the late John Aitken Lockwood, Liverpool.

Purvis—Raymond.—On July 31st, at St. Mary's, Preston, Yeovil, William Prior Purvis, F.R.C.S., M.D., M.S., of Southampton, to Dora, eldest daughter of Walter Raymond, of Preston, Yeovil.

Savage—Cooper.—On July 26th, at St. Matthew's, Brixton, Thomas Copeland Savage, F.R.C.S., second son of the late Warwick Savage, Esq., of Burslem, Staffs, to Madeline, second daughter of William Cooper, Esq., C.C., 65, Brixton Hill.

Stephens—Smirthwaite.—On July 30th, at Holy Trinity Church, Burnley, John Harding Stephens, M.B., son of the late Henry Stephens, of Knutsford, to Annie Maude, only daughter of the late Dr. S. V. Smirthwaite, of Coal Clough, Burnley.

Deaths.

Lamb.—On August 2nd, at Thorpe Lodge, Shirley, Southampton, of angina pectoris, Surgeon Lt.-Colonel Henry Lamb, R.A.M.C., eldest son of the late Rev. R. G. Lamb, B.A., late Colonial Chaplain, Capetown, aged 64.

Permewan.—On July 26th, at his residence, Chapel Street, Redruth, Cornwall, John Permewan, L.R.C.P.Ed.

Watts.—On August 1st, at 97, Central Hill, Upper Norwood, Deputy Surgeon-General Joseph Watts, late A.M.D. (retired).

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, AUGUST 13, 1902. No. 7.

Vienna Clinical Lecture.

SPINAL CHANGES IN MUSCULAR DEFECTS.

By PROF. H. OBERSTEINER.

[FROM OUR VIENNA CORRESPONDENT.]

WE find, gentlemen, in Leyden's classical work on "Diseases of the Spine," published in 1875, descriptive examples of partial atrophy of the nerve centres in the spinal column associated with deformities—congenital and accidental—contractions of limbs or malformation of the cerebral mass, such as agenesia or aphasia. The opinions of this author are still to be valued for their accuracy in throwing light on the trophic disturbance in the organ by the wasting that takes place elsewhere.

He also demonstrated the converse that wasting or atrophy took place in the gray matter of the cord when the distal member was disused. Leyden's conclusions were obtained from a very rough survey, and a limited quantity of material at his disposal which have since been supplemented from time to time by other more accurate publications on congenital defects which may be briefly expressed in the words of my colleague, Prof. Redlich, that "Amputations of any kind produce two forms of change in the nerve substance of the cord: 1st, one immediately after the amputation when degeneration and the motor cells are affected, and 2nd, that after the course of a year atrophy and contraction of one-half of the cord takes place. Knowing this, it is necessary to go into other details and localise the position as well as determine the cell group of nerves affected by the removal of any extremity or set of muscles.

The method of experimental inquiry for "axial" or secondary changes have been followed from the anterior horns of the cord to the nerve fibre into the amputated organ resulting from injury, &c., but it requires more care to follow the defect of a muscular group with congenital origin. The results of these inquiries have now resulted in three facts: (1) According to Sano, the anterior horns have each corresponding cell groups to supply. The researches of Bruce in the lumbar region are interesting in this respect, but congenital defects are those which provide us with the most trustworthy evidence. (2) Marinesco holds to the opinion that these cells in the cord supply certain nerves and not particular muscles; while a third opinion, in which Nelis, Neef, and others concur, is that each segment of the spinal cord has a localisation, such as one for the hand, another for the forearm, &c. Too much caution cannot be exercised in this morbid diagnosis. In all congenital cases we expect a nuclear defect in the cells where infantile destruction had existed. In many of the cases of pectoralis defects no changes whatever were found in the anterior horn cells, which agrees with Schlinger's experience.

At the meeting (June 11th, 1901) of the "Vereines für Psychiatrie und Neurologie," Primarino Linsmeyer showed a man, æt. 48, who had congenital atrophy of the right sterno-cleido-mastoideus, the clavicular portion of the right cucularis, pectoralis major except the clavicular portion, the supra- and infra-spinati, and the rhomboidei. The man died shortly after, and Linsmeyer kindly handed the nerve system over to my charge for careful examination, which I did from the fourth cervical to the fifth dorsal inclusive, with 800 sections, and coloured some by Gieson's method, others by Weigert's. I may add that I examined the cord without knowing which of the sides was affected, although I had seen the case some time before, yet I had forgotten which side was affected, and looked upon this as an advantage against any prejudice that might influence the investigation. Unhappily, however, this doubt could not presumably long be concealed, as the first sections showed a great deficiency of cells in the right side. The three upper segments, as well as the medulla oblongata, were examined owing to the defect in the sterno-cleido-mastoid muscle, but nothing special to note was observed; while the cerebral appearance seemed changed in its configuration. The accessorial nerve was cut at several points and examined, but no difference from the opposite side could be observed. This nerve supplies the respiration and extends down to the sixth cervical segment which was supposed to be affected, and no change could be seen in the anterior horn of the cord, neither in its calibre or its section were the fibres of the accessorius affected.

Coming now to the anterior horns in particular, I may say at once that no asymmetry, or more correctly, very little change of symmetry, could be observed, although it must be admitted there was a slight decrease of the affected side when closely examined, which could hardly be valued as a pathological condition. The numbering of the cells was next undertaken, and only in two sections which followed each other were these found markedly to vary, and these again only to be found in one of the groups located in the anterior horns.

Nothing noticeable was observed in the medial group; the dorso-lateral group was distinctly richer on the right side in large cells than that same group in the left side of the cord, and certainly the medio-neutral group of the anterior horn was in no way reduced. The only group by this comparative method of taking right and left in the same subject that could be said to be morbidly affected was the ventro-lateral group, which was confirmed in all of the sections down to the sixth cervical; but the difference was so slight that even numbering the cells approaches perilously near failure in discovering any sympathy with the muscular defect present in life.

The eighth segment, however, in the left dorso-lateral group revealed a great change in the cells, even none, or one or two being present, while the corresponding right horn had twelve or more well-developed cells. This experience is only common with many others in such investigations that such groups in the lateral cells of the eighth segment are distinctly affected. It is also worthy of note that the Weigert preparations revealed nothing different in the reticular structure of all the segments examined either above the fourth or below.

While engaged on the examination of this patient Parhon and Goldstein published in the Neurological "Centralblatt" the theory of the "metamerien" and "spinal motor localisation" which has now become public property. These authors record their experimental resections of the pectoralis major in dogs as well as examinations of men whose pectorales muscles were removed some time before death. In these experiments they found, in the neighbourhood of the upper half of the fifth segment and to the sixth segment, changes in the anterior horns of the cord except in the medial and dorso-lateral groups. So far as it goes this investigation agrees with my own, as these groups were in my own case quite intact. There appears, however, to be a smaller number of cells affected in Parhon and Goldstein's cases than in my own, and those found were at a higher level, which might be affected by the pectoralis in my case being only partially affected and not wholly paralysed. In their case the one side was particularly observed, knowing the affected side, and might thus be prejudiced in the examination.

Whatever may be the value of these investigations, though few, it is important to note the proximity of localisation, and, as I pointed out at the Paris Medical Congress in 1900, it was necessary to note the variation and compare pathology with symptoms to exactly the limit of variation. If we compare the results of Kaiser and Bruce, who give the particular segment, we are instantly surprised with the extremes of variation.

Flechsig's examinations of the pyramidal paths are equally far apart in a large number of cases. It is possible that the finer structure may be rigidly approximate in the pathology, and from its narrow limit be radiated and the radiation only observed; or, as it is well known that the finer structure of both sides of the cord vary, even in health this congenital condition may be noted as the pathological change in preconceived observers. As an example to illustrate my meaning, I shall give you a sketch of the cord in one of the sections in my own case, taken through the sixth cervical segment, which I shall label B. Alongside of this I give you another sketch from a suicide, taken through the same segment at the same level, and whose muscles were perfectly healthy and strong at the time he perpetrated the deed, which I label A. The cells are marked by dark points, which will be observed to be less in the healthy muscle patient than in the man with the life-standing muscular defect. From the specimens given, the healthy muscular man has the most morbid appearance, and would be accepted as such were the facts not opposed to this assumption. The constant "degeneration" met with in the triangular mark of cervical parts of the cord is nothing more than variations in a healthy state as proved by recent inquiry. These physiological changes have also been proved in the posterior roots by Redlich. The glia in the periphery of the cord, as well as the septum in the posterior commissure, are so anatomically different in healthy individual cases that no correct standard of comparison can yet be fixed for a normal example to be fixed as unity. Although no functional defect can be observed in these variable cases it is quite possible that the anatomical differences may be pathological, or probably better expressed as pathogenic or predisposing changes. I have already pointed out in a former article that comparative anatomy may yet prove that the resistance to disease in the spinal cord is chiefly due to an altered anatomical constitution or construction of the units in the cord. This is no novel theory, as we are now acquainted and frequently assign many other diseases to a pathological "habitus" which it could be no more absurd to speak of a "glieous habitus" of the spinal organ when a glia hypertrophy is found in disseminated sclerosis, syringomyelia, &c.

From these references we may conclude that congenital muscular defects in the spinal cord cannot be accurately defined owing to the wide variation in the anatomically healthy individual closely resembling the pathological conditions.

REMOVAL OF
DOUBLE PYOSALPINX
OF
SEVENTEEN YEARS' STANDING:
WITH SPECIMEN. (a)

By ROBERT HUGH HODGSON, M.D., &c.

THE symptom pain enters so largely into the many diseases to which the generative organs of women are liable and into the different phases of those diseases that it is one of the most misleading of the chaos of symptoms attributable to diseases of the pelvic organs. If, therefore, I attempt in a few words to clear the atmosphere to but a slight degree I trust that you will not consider my effort a waste of your valuable time. Pain in the uterus may be referred to the front over the pubes or behind to the sacrum. When over the pubes the pain is mostly due to interference with the function of the nerves by pressure of blood, as in the approach of menstruation, to the check to that flow by catarrh, to shock immediately preceding the flow causing congestion in the capillaries, to over stimulation by excessive coitus, to alcoholism, to anæmia, or to the pressure of an over-loaded bowel preventing the return of blood. Among the more permanent causes may be enumerated the stimulation of ovarian disease, and the interference with the return of blood from pressure of tumours, from inflammations involving the veins or lymphatics, and from cardiac disease. In an endeavour to name all the causes of congestion of the uterus one might spend an enormous length of time, serve no good purpose, and then be found to have omitted some considered to be most important.

The above list is, I think, sufficiently varied. Pain in the sacrum, one of the commonest indications of uterine disease, is generally considered to be due to direct pressure upon the sacral plexus as by pregnancy, by fibroids or other growths, or by the binding down by adhesions following inflammation, but I venture to express the opinion that pain in the sacrum from this cause is rare in comparison with that arising from pressure upon the nerve terminal filaments of the uterus by causes such as I have specified as giving rise to pain over the pubes. For the most part when the pain is in the front, especially in its early stage, it is functional and amenable to medical treatment, whereas when it is in the sacrum it is the result of long-continued congestion, having wrought structural change in the uterus which necessitates more radical means for its cure. Though it is true that temporary relief can be afforded in a large proportion of these cases by a copious depletion, instances of such must be common to most of us where patients suffering for many years from constant backache seek relief for the day in order that they may be equal to attend a social gathering. Yet it is seldom that such simple tactics suffice to restore the patient to health, for it is in these chronic cases that we may expect to find a large amount of fibrous tissue either interspersed between the muscular structure of the uterus or supplanting it, and by its contracting nature, in addition to its weight, tending to flex the organ upon itself. It is somewhat difficult to conceive that a healthy uterus should of its own accord fall over one way or the other, or that it should, when so displaced by outside influence, remain as an inert body void of the power of self-rectification. Evidence of this loss of power may in some cases be demonstrated by the introduction of a Hodges' pessary, when it will be observed that though the cervix has been thereby canted in the opposite direction the kink in the cervical canal remains. Draw upon the cervix of a flexed uterus with a volsella and the flexion is more or less removed; release the cervix and the flexion immediately returns. The fact that a pessary does, in some cases of old sacral pain, give relief, indicates the degree of mischief wrought in the uterus rather than the source of the pain. The pyriform shape of the uterus, the direction of the fibres of the three layers composing its muscular coat, and the absence of a fixed point in the pelvis, indicate to my mind that nature intended that the uterus should possess exceptional power of retaining its normal shape when non-pregnant, and of regaining it after delivery, and that the majority of flexions are due to pathological changes in the uterus itself brought about by congestion of that organ, and that the relief from pain which depletion gives is due to the reduction of blood pressure permitting the lymphatics to exercise their characteristic activity when relieved of even but a small amount of pressure. I think it will be admitted that the uterus is more often retroflexed than anteflexed, and although there is in the present day a feeling of doubt whether there is such a displacement as anteflexion, still when we find the axis of the body of the uterus almost at right angles to the axis of its cervix, with the acute angle forwards, I think we must say that the uterus is anteflexed. Whether the body be flexed upon the cervix or the cervix upon the body matters not, for we have found that one part is flexed upon the other anteriorly. The explanation of retroflexion being more common than anteflexion may be found in the fact that the posterior surface of the body of the uterus is larger and thicker than the anterior, and therefore, receiving more blood during congestion, affords more encouragement for increased growth of fibrous tissue with its subsequent contraction.

(a) Paper read before the British Gynæcological Society, July 10th, 1902.

The case which I will now, with your permission lay before you, illustrates in several particulars the views I have above expressed.

In the year 1885, a lady, then æt. 19, consulted me for pain over the pubes which became greatly exaggerated with the approach of each monthly period, causing her to roll upon her bed in agony for many hours, and which was accompanied by hysteria of a distressing character. I treated her medically for a few weeks, but without giving much relief. I then examined her and advised hot douches and depletion. This advice had, however, the effect of frightening her, and she sought the assistance of a gentleman in Harley Street, who told her that she had nothing the matter with her beyond hysteria, and gave her a prescription. She did not receive much benefit from his treatment, and struggled on, suffering "dreadful pains in front" at her periods until 1889, when, still believing in the infallibility of her doctor, and being desirous of going to Burmah on mission work, she left this country on the doctor's assurance that she would recover. On the voyage out, however, she suffered intensely with menstrual pains, with a high temperature for a few days. Two months later she was again attacked in the same way. In November, 1890, she was stabbed in the chest by a black. The fright thus given she considered started a pain in her back. She was examined, and a pessary inserted which relieved her back, but as the doctor considered that there was some further mischief than displacement he sent her to the Dufferin Hospital, Rangoon, where she remained under treatment for a month. The treatment consisted in syringing and electricity, which so far relieved the pain in her back that she was able to continue her duties, except during her periods, for four years. In 1894 she had malarial fever with boils all over her body. The pain in her back returned, and a muddy discharge from her vagina commenced and lasted continuously until she came to England in 1896, when she became an out-patient of the Samaritan Hospital for a period of five months, when she was taken in and operated upon. This treatment stopped the muddy discharge and relieved the pain over the pubes for one year, but it did not relieve the sacral pain. In 1897 she returned to Burmah, but had a bad voyage, with return of her old menstrual pains. On arrival in Burmah she was seized with very severe pain in her back, and could walk only with difficulty. Four months later she again had malarial fever, followed by severe pains in her stomach, thighs and legs, with constant fainting, which lasted four or five days. In 1898 two large abscesses formed in her armpits, and in the same year she had a severe attack of pain in her left side, thigh and leg, which was ascribed to inflammation of her womb. From this date her menstrual flow gradually decreased until the present year, when it almost ceased. In 1898, in addition to the pain in her back, which had been continuous since 1896, a swelling, accompanied with pain, commenced in her right side. In 1899 she was sent to Rangoon General Hospital to be curetted, but dilatation of the cervix only was done. The pain in the right side continued until the following December, when the patient was too ill to move in bed. She was given a hot bath for half an hour, when she fainted. She was then syringed daily, and two glycerine plugs inserted. But the pain becoming so extreme, in desperation she took some pennyroyal, after which a cyst burst in her inside, flooding her with a brownish watery discharge, and giving great relief from pain and loss of the swelling in her right side. From that time the pain in her right side, which had lasted about a year, left her entirely. After January, 1900, her menstruation became very irregular, and in November of that year she had an attack of inflammation of her right leg which confined her to bed for a month. From January 1901, until June of this year she had constant headache, diarrhœa and pain.

From the foregoing history, which I am sorry is not more accurately recorded, I think no one will doubt the patient when she says that the seventeen years of suffering she endured had made her life not worth living. Consequently, she again returned to England and placed herself under my care. On May 24th, a few days after arrival, she was put under an anæsthetic and examined, but all that I could find was an anteflexed uterus, and what appeared to be the edges of cirrhotic ovaries. On June 4th she was again put under an anæsthetic, and I opened the abdomen a little to the right of the median line and a little lower than midway between the umbilicus and pubes. There were no adhesions and no trace of an old sac; the uterus was freely movable, cylindrical and anteflexed; the ovarian ligaments were short, and the Fallopian tubes, which were also rather shorter than usual, were about normal in circumference, with retracted fimbriæ and slightly uneven surfaces. The greatest amount of distension of either tube is seen in the specimen now shown. The ovaries are rather atrophied, hard at their free borders and have a degenerated feel at their middle and upper third. I removed both ovaries and Fallopian tubes near to the uterus and closed the abdominal wound, the walls of which were thin, with silk-worm gut passed through the whole thickness. The day following the operation, and for nearly four days after, there was a sanguineous discharge from the vagina small in quantity. On the second day after the operation the pain, which had been incessant in the sacrum for the last six years, disappeared and has not since returned. The pain over the pubes has also subsided. Fourteen days after the operation the patient was up and about her room, and during the following week she took daily walks out of doors. Her temperature never rose above 99·4°. She is now thoroughly restored to health, and intends shortly returning to Burmah to again take up her mission work. Upon subsequent examination of the Fallopian tubes both ends were found closed, and upon slitting them up sacculations were seen containing what appeared to be pus, which, having been examined by the Clinical Research Association, was reported to be "pus with a trace of blood and a very large number of bacilli." A further report said that "the only organism identified was the bacillus fluorescens liquifaciens, which belongs to the group of non-pathogenic bacteria."

In this case the pain over the pubes was constant during seventeen years, with the exception of one year, and the pain was apparently in the situation of the nerve pressure. The sacral pain was constant for six years, and was of reflex origin. The cylindrical shape, the hard consistency, and the return to its flexed condition after straightening point in my opinion to an abnormal amount of fibrous connective tissue. I attribute the relief of sacral pain two days after the operation to lessening of the blood supply to the fundus and the subsequent absorption of arterial blood exudation. The ovarian monthly stimulation of the uterus to congestion having been checked, there will be no need for development of collateral circulation, whilst absorption having been thereby stimulated, I trust that there will be no return of pain.

ASTHENOPIA. (a)

By E. KENNETH CAMPBELL, M.B.Ed., F.R.C.S.Eng.,

Surgeon to the Western Ophthalmic Hospital; Surgeon-Oculist to His Highness the Maharajah of Baroda.

(Continued from page 102)

Orthophoria, or Ocular Equilibrium.—This term has reference to that condition of sight in which the two eyes work in perfect unison, whether in a state of repose, and during fixation: in plain words, when they act alike. The following experiment will illustrate the meaning of this: Let a person be required to fix an object two feet off, and a card be made to screen one eye, it can be seen that this covered eye, although now excluded from vision, still retains its position of correct fixation and does not deviate. This associated, or conjugate, action of the two eyes implies *perfect muscular balance* or *orthophoria* (Gr., orthos — right, phoreo — I bear), and is the outcome of the co-ordinate actions of various groups of muscles, controlled by a centre in the brain. Any disturbance of the proper working of this neuro-muscular machinery causes want of balance, technically known as *insufficiency* or *heterophoria.* Orthophoria, then, means proper muscle-balance, with no tendency to deviation, while heterophoria signifies a tendency to deviation which requires an effort of will to control.

Asthenopia (asthenès — weak, ops — sight), as before explained, is a condition in which visual acuteness remaining good, even though all refractive error may have been corrected, there is still an incapacity for sustained visual effort.

The symptoms associated with it are various, and may be briefly summarised as: An inability to read or work for any length of time without "eye-strain," the eyes becoming hot, uncomfortable, heavy, or beginning to ache; headache either referred to the brows or the head generally; conjunctival irritation, photophobia, blepharitis, neuralgia, tenderness on pressing the globes, a feeling of tension or heaviness in the eyes, and occasionally diplopia, giddiness and nausea. Sometimes a patient may complain of the eyes feeling "like balls of fire."

All these symptoms are liable to become specially marked towards the end of the day, and may be particularly noticeable when working in artificial light.

A not uncommon cause is the wearing of wrong glasses, more especially such as are incorrectly centred with respect to the pupils, in consequence of badly-fitting frames. A de-centred lens in front of one eye for instance, acts as a prism and means a displacement of the retinal image, necessitating an effort of squinting proportinate to the displacement in order to effect binocular single vision.

Causes.—(1) General.
(2) Local.
Both of which often co-operate.

(1) *General.*—Any debilitated state of the system inducing premature exhaustion of the neuro-muscular apparatus of the eye, *e.g.*, influenza, recovery from an illness, childbirth, the various forms of anæmia.

Local.—*(a)* Accommodative.
(b) Muscular.
(c) Nervous.

(*a*) *Accommodative.*—This is, perhaps, the commonest form, and is not to be confounded with the natural fatigue of the ciliary muscle through excessive use of the eyes.

It may be met with in any refractive condition, but is especially apt to occur in astigmatism and anisometropia; in both these cases because the patient tries to correct the refractive error by unequal contraction of the ciliary muscles.

It is particularly liable to develop after influenza, childbirth and recovery from an illness.

Symptoms.—The images of print and of all near objects become blurred, as the exhausted ciliary muscle relaxes and cannot maintain a state of sustained contraction; pain in the eyes and forehead; headache. At first these symptoms may be noticed only towards the end of the day, but after a time they often become chronic.

(*b*) *Muscular.*—This form of asthenopia is generally known as *muscular insufficiency* or *heterophoria,* and is due to a weakness of the extra-ocular muscles, more especially of those concerned in convergence,

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(*a*) *Gr.* asthenes—weak, ops - sight.

the internal recti, and hence is most frequently found in connection with *myopia*, though it may occur in emmetropia, hypermetropia, or astigmatism. In this variety of asthenopia there is a *latent tendency on the part of one eye to deviate from its fellow*, and so cause diplopia. This constant tendency to deviation *can only be overcome by a forced muscular effort*, the result of increased innervation, *i.e.*, in excess of that normally required. It is accordingly *a condition of forced equilibrium*, and so is on the borderland of squint, and was called in consequence *latent squint* by von Graefe. (In real squint the deviation of the axis of the eye cannot be overcome by a forced muscular effort.)

Varieties of Heterophoria.

Taking as our standard perfect muscle-balance, orthophoria, we have:—

(i) Exophoria — a tendency to outward deviation.
(ii) Esophoria — a tendency to inward deviation.
(iii) Hyperphoria — a tendency to upward deviation.
(iv) Hypophoria — a tendency to downward deviation.
(v) Hyperexophoria — (i) + (iii).
(vi) Hyperesophoria — (ii) + (iii).

As a very rare clinical condition *cyclophoria* or "rotatory" heterophoria may be found. It is usually met with in astigmatism when the principal axes are oblique.

Muscular asthenopia may occur with any form of ametropia, and even emmetropia, but when of purely local origin is generally associated with myopia or hypermetropia; for in both of these conditions there is a lack of the natural harmony between accommodation and convergence, the myope being called upon for an effort of convergence in excess of accommodation, and the hypermetrope for an effort of accommodation in excess of convergence.

Symptoms.—The eyes soon become fatigued, and ache. There are often vague sensations of discomfort referred to the eyes and head generally, and there may be indefinite feelings of languor and disinclination for prolonged mental exertion, especially writing. There may also be complaint of diplopia and vertigo, and both the conjunctiva and margin of the eyelids may look reddened. If one eye be closed the symptoms of asthenopia disappear, as now convergence is no longer necessary for fixation.

Tests for Muscular Insufficiency.

(*a*) *Fixation Test.*—The normal convergence-near-point is two inches, approximately corresponding to tip of nose. Let the two eyes steadily fix an object (*e.g.*, uplifted finger or a pencil, &c.) held in the horizontal median plane thirteen inches off. Now bring the object gradually closer to the face, when it will be noticed that one eye becomes unsteady in its fixation, and after a short period of oscillation, either slowly or suddenly, deviates outwards (exophoria) *before the normal convergence near-point is reached.*

(*b*) *Screen Test.*—Whilst the patient is still fixing the object, cover one eye and then the other alternately with a screen, and assume that there is deviation of the covered eye outwards. Suddenly withdraw the screen, diplopia ensues, as the visual axis of this eye is directed outwards. To obviate the double-vision a forcible effort will be made by the deviating eye to turn inwards in order to fix the object and so effect binocular single vision.

This muscular insufficiency requiring a forcible effort to redress the disturbance of equilibrium is sometimes known as "latent squint," as before explained.

(*c*) The normal balance, sufficiency, or fusion power, of the extra-ocular muscles is expressed by the strength of the prism that each muscle by forcible effort can overcome in order to fuse the resulting double images. It is determined in the following way:—Take the patient into the dark room and place in front of him a small flame six metres off, and on the same horizontal level with the eyes.

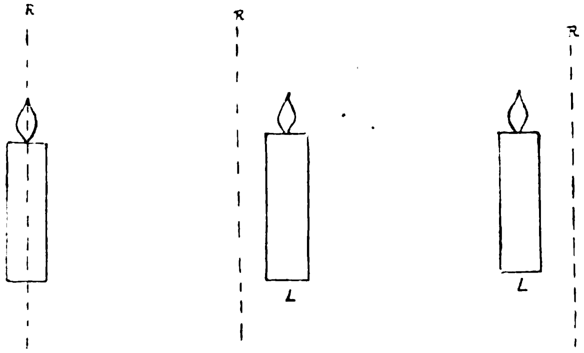
Convergence.—Beginning with a weak one, place stronger prisms in turn before one eye, each with its base towards the temple. The strongest with which the flame remains single gives the measure of the power of internal recti. In a similar way test the power of the external recti by placing the prism with its base towards the nose, and then the superior and inferior recti by placing the prisms with their bases respectively downwards and upwards.

The internal recti being the strongest (they have an insertion into the globe further forward than the others) of the extra-ocular muscles, because so much used for convergence, have a fusion-power, *i.e.*, can overcome

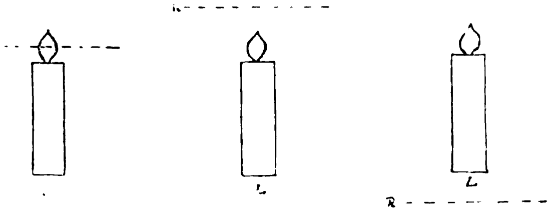
a prism of	30° to 50°
external recti	6° to 8°
superior and inferior recti	3°, but may be higher.

If diplopia results from the employment of prisms of the above-indicated powers, the case is one of muscular insufficiency.

The Maddox Rod-Test in:



Orthophoria. Exophoria. Esophoria.



Orthophoria. Left Hyperphoria. Right Hyperphoria.

(*d*) One of the most accurate and delicate tests for muscular insufficiency is by means of the *maddox-multiple-rods*. This is a contrivance by means of which the image of a flame as seen by one eye is converted *into a long streak of light that is at right angles to the axis of the rods*, which, being so dissimilar in appearance to the flame itself, has no tendency to be fused into the image formed by the other eye. It is generally made of red glass so as to make the contrast the more marked.

Method of Application.—Both eyes are kept open and uncovered, and the patient is directed to look at a flame six metres off on the same plane with the eyes, and the cylindrical bars are to be placed in front of one eye *horizontally*. If the muscular balance be correct (orthophoria) a red streak of light will be noticed situated vertically, and corresponding to the long axis of the flame as seen with the other eye.

If the red-streak be displaced laterally there is muscular insufficiency, *e.g.*, if the red streak appears to the left of the flame—crossed diplopia; if to the right—homonymous diplopia.

The amount of insufficiency is measured by the prism, which, held in front of the maddox-rods, will cause the red streak of light to correspond exactly to the long axis of the flame.

For testing the power of the superior and inferior recti the rods should be placed vertically, when the image of the flame will be converted into a horizontal streak of light, which should cut the flame at right angles. The degree is measured by prisms in the same way.

Rules for Correction by Prisms.—Find the sum of the correction for *both* eyes. If the insufficiency be less than 16°, take one-fourth as the maximum correction for each eye. This should rarely exceed a prism of 4°, under any circumstances, on account of the weight and chromatic dispersion a stronger prism entails. *Begin by prescribing half of this*, and increase the strength according to results.

Examples.—R. E. with maddox-rods placed horizontally the patient sees the red-streak 9° to the right and with L. E. 7° in the left

$9^\circ + 7^\circ = 16^\circ =$ total amount in the two eyes together.

$16^\circ \div 4^\circ = 4^\circ$

prescribe prisms of 2° with their bases out for each eye, and change to stronger (not exceeding 4°) if found desirable.

Prisms are to be regarded as affording merely a temporary relief, and are not for permanent use. It is to be understood that they do not remove the cause of the deviation, they simply *relieve* the discomfort. It is only when other means fail that they are to be employed, and under no circumstances should they be used for too long a time on account of the fact *that their prolonged use is liable to cause an increase in the insufficiency*. If spherical glasses are worn, de-centred lenses are to be preferred.

In exophoria the base of the prism must be turned *in*.
In esophoria the base of prism out.
In hyperphoria up or down.

(*c*) *Nervous.*—Other names for this are: *neurasthenic*, and *hysterical*, asthenopia. It must not be confounded with simulated blindness.

In all cases of the affection it is assumed that the visual power is good; and that if ametropia exist, the suitable correction has been supplied.

It is *to be regarded as a neurosis*, and most cases are to be found among hysterical young women.

The symptoms are those arising in connection with a complicated neurosis in which the visual phenomena play merely a part.

Diagnosis.—Alterations in the visual field, such as peripheral contraction, hemiopia, scotomata, rapid blurring or the complete blotting out from view of the object fixed; photophobia; pains in the eyes or head, so that the work has to be laid aside. The subjects are usually women suffering from anæmia, uterine disorder, or those convalescent from an acute disease. Although the symptoms may last a long time, even years, the prognosis is distinctly good.

Treatment of Asthenopia.

The general health is to be attended to. *Any ametropia that may be present is to be properly corrected*, and all near objects are to be held as far off as possible compatible with clearness of definition. If continuous near work be rendered difficult, owing to weakness of the internal recti, prisms or de-centred lenses must be worn.

De-centration of Lenses.

If ordinary lenses are necessary, but the action of a prism is required as well, the effect of a prism can be produced by de-centring, *i.e.*, grinding the lens in such a way that the geometrical centre falls upon an excentric part.

For example, if a convex spherical glass be de-centred *in*, or a concave spherical lens be de-centred *out*, the effect is that of a prism with its base *in*.

So, likewise, if a convex lens be de-centred *up*, or a concave lens be de-centred *down*, the effect is that of a prism with its base *up*.

Rules for Correction by De-centred Lenses.—A spherical lens of 1D in order to produce the effect of a prism of 1° must be de-centred at 8·7 mm. Accordingly, knowing the value of the prism necessary, we multiply it by 8·7, and divide the result by the strength of the spherical lens required.

E.g., a 6D spherical lens combined with a prism of

$$2^\circ, \text{ base } in = \frac{2 \times 8{\cdot}7}{6} = 2{\cdot}9 \text{ mm.}$$

hence in this case, the 6D lens, in order to possess the added value of a 2° prism, must be de-centred 2·9 mm. inward.

If, in spite of the adoption of the above-mentioned methods of treatment, symptoms of asthenopia still persist, the eyes should be given a long rest by abandoning all forms of near work, *and protecting them from light by the use of tinted glasses*, and, in the case of young subjects a prolonged course of atropine instillation is often necessary.

In the nervous, or neurasthenic form, hypodermic injections of strychnine and the employment of the constant current will often bring about an excellent result.

The application of the constant current to the cervical sympathetic more particularly is to be recommended.

Tenotomy.—If other methods fail, tenotomy is sometimes of considerable value in well-selected cases.

Summary of Treatment.—In the *accommodative* and *heterophoric* varieties of asthenopia, undoubtedly the most promising method of treatment is *to accurately correct the error of refraction*, if present. ·25° of astigmatism, left uncorrected, may make all the difference between success and failure. Let it be clearly understood *that the more accurate the correction, the greater the improvement*. I never hesitate to order presbyopic glasses from the age of thirty years, or even earlier, for those who have to do much reading or writing.

If glasses are unsuccessful in giving relief, completely rest the eyes for a given period, and endeavour to improve the general health. If after this the symptoms still persist, prisms, in addition to the glasses or de-centred lenses, should be given a trial. Lastly, if all these means fail, tenotomy must be resorted to.

A METHOD OF TREATMENT OF CERTAIN CASES OF EMPYEMA.

By WILLIAM TURNER, M.S., F.R.C.S.,

Senior Assistant Surgeon, Westminster Hospital; Surgeon, Royal Hospital for Diseases of the Chest, City Road; Surgeon, Seamen's Hospital Society, Dreadnought Hospital, Greenwich.

AMONG the patients suffering from empyema that the surgeon is called upon to treat, there are a certain number to whom the administration of a general anæsthetic is attended with great danger. The cause of this is probably two-fold: first, the direct mechanical action of the presence of a large collection of fluid in the pleural cavity disturbing the action of the heart, and secondly, the altered condition of the heart muscle due to the absorption of toxins, partly from the empyema and partly from those connected with the illness which precedes and causes the empyema.

Many deaths have been reported during the administration of chloroform to patients suffering from an empyema. In all text-books special stress is laid on this fact. Death is due, probably, not so much to respiratory as to cardiac failure, as mentioned above; this was certainly so in a case under my care, on whom an operation was about to be performed for the relief of a large empyema on the left side, which had been present between four and five weeks; chloroform was administered by the open method, but before one drachm had been given the heart stopped beating, and although everything was done it did not respond to treatment.

Unfortunately, gas and ether are not suitable drugs for these cases, as the congestion produced by their administration makes them dangerous indeed; and chloroform or A.C.E. mixture must be chosen, and it should not be forgotten that both these are circulatory depressants.

In cases where it is certain that the risk of a general anæsthetic is very great, I find it very useful to drain the cavity for a time by means of a cannula introduced through an intercostal space by means of a trocar, under local anæsthesia only. This obviates for a time the necessity of a general anæsthetic, and saves the patient from running extra risk thereby; though the further treatment of the condition by excision of a portion of a rib, and so obtaining free drainage and exploration of the cavity must, in most cases, be resorted to later, especially in those in which there is a large amount of lymph lining the walls of the cavity; but then the danger of the anæsthetic is much less, as the two main causes of danger are removed.

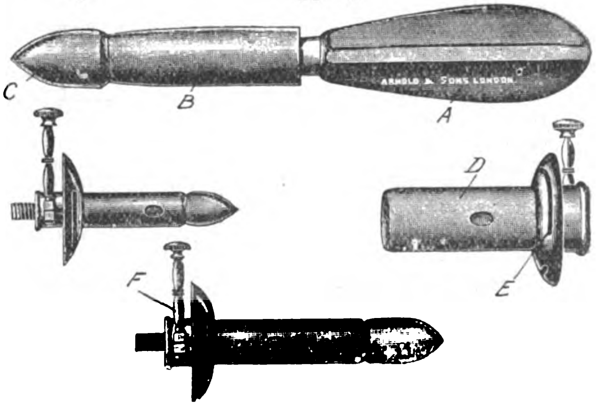
The method of procedure is as follows:—

The whole of the skin of the side affected is thoroughly purified, and rigid antiseptic precautions are observed throughout. The spot for insertion of the trocar is then chosen; if possible, the seventh space on the right side, and the eighth on the left; in the posterior axillary line, or just in front of the anterior margin of the latissimus dorsi muscle. A 4 per cent. solution of eucaine β is then injected subcutaneously, superficially and deeply, over an area of a circle of two inches radius from the spot chosen. An exploring needle is then introduced into the pleural cavity to confirm the presence of pus in this situation, and the proximity of the lung to the chest wall noted by the point of the needle. The needle having demonstrated the presence of pus, the lung being sufficiently far removed from the parietal pleura, and the part being sufficiently anæsthetic; an incision an inch and a-half long is made through the skin, with a scalpel, parallel to the margin of the rib, and gradually deepened until the external intercostal muscle is exposed covering in the space. The specially made trocar and cannula is then suddenly and deliberately plunged through the muscle into the cavity, the trocar withdrawn, and the cannula left *in situ* draining off the pus. The cannula is then fixed by means of tape round the chest, the orifice covered by a large piece of purified protective, and this again by a large antiseptic dressing, held in position by a many-tailed bandage.

The protective over the tube serves to act as a valve, allowing the pus to pass through the tube, but preventing air from entering with each inspiration, thus assisting the lung to expand. The dressing is changed as often as necessary, with strict antiseptic precautions, the protective being left *in situ*. The silver cannula is replaced by an indiarubber tube after the second day, and later on if necessary, some further operation undertaken for the cure of the case.

The special features of the instrument are seen in the accompanying diagram.

The cannula, and, of course, the trocar to fit it, is oval in transverse section and not round, to enable it to be more effectively used between the ribs, the long diameter in the long axis of the intercostal space; the cutting edge of the trocar is in the same diameter so as to prevent any risk of wounding the intercostal vessels or nerves. To allow for this long razor edge the head of the trocar is comparatively very large, and in the full-sized tube projects nearly three-quarters of an inch from the end of the cannula. In using the trocar there is therefore a certain amount of risk of wounding the lung, but this is provided against in two ways—first, by noting the distance of the lung with the exploring needle, as mentioned above, and, secondly, by adjusting the movable shield on the cannula, which can thus be used to prevent the trocar from penetrating too deeply. The shield is fastened to the cannula in the same manner as the shield of a Durham's tracheotomy tube, and the top of the cannula is fitted with a rim to prevent the shield slipping off.



A. Handle fitted with screw to fit trocars of all sizes. *B.* Trocar. *C.* Large head of trocar with cutting edge. *D.* Cannula. *E.* Shield with slots for tape. *F.* Adjustable screw for fixing shield on cannula.

In the shield there are two slots, so made that whatever the position of the tube (*i.e.*, whatever the direction of the ribs), pieces of tape threaded through them will pass horizontally round the chest and keep the tube in place. The cannula has two small openings near to its inner end on the upper and lower surface to allow for better drainage.

Below will be found notes of some cases in which this method of treatment has been adopted.

1. C. S., æt. 28, a sailor, developed acute basal pneumonia on the left side during the fourth week of a severe attack of enteric fever, and this was followed by a large empyema on the same side. The temperature was of the hectic type, the whole of the left lung out of action, and signs of fluid extended up to the third rib in front. The heart sounds were almost inaudible, the apex beat could not be made out; the pulse was very feeble and rapid; there was much dyspnœa, and he was unable to lie on either side.

A general anæsthetic was considered extremely dangerous, so a trocar and cannula was inserted in the manner described above in the eighth space as far back in the axilla as it was possible to get, as the patient could not be turned over at all. The pus was thin and drained away well; no masses of lymph appeared to be present. The tube was removed on the sixth day, and replaced by an indiarubber one of half an inch in diameter. No further operative treatment was found necessary. The cavity gradually closed, and finally healed completely. The pus was found to contain the typhoid bacillus only.

2. E. L., female, æt. 36, was admitted into the Royal Hospital for Diseases of the Chest on November 24th, 1899, suffering from pain in the left side of the chest, and on examination some indefinite physi-

cal signs were found at the apex of the left lung. On December 8th she developed acute pleuro-pneumonia at the left base. Fluid was poured out very rapidly, and this necessitated aspiration on the 15th and 16th, more than two pints of semi-purulent fluid being withdrawn on each occasion. The next day her condition was extremely serious, temperature, 102·4°; respirations, 52, shallow; pulse, 136, very soft and feeble; dyspnœa was marked and face and extremities were cyanosed.

The signs of fluid in the left pleural cavity extended as high as the spine of the scapula; the apex beat of the heart could not be made out, but the area of cardiac dulness extended well over to the right of the sternum.

A general anæsthetic was out of the question, so, aspiration having failed to give relief, it was decided to drain by means of a cannula, which, under eucaine, was introduced through the ninth space in the posterior axillary line, and forty-five measured ounces of pus removed. This was followed by slow but gradual improvement, but on the second day she complained of pain, which radiated from the wound to the middle line in front. The pain seemed to be due to the pressure of the silver tube passing through the intercostal space, so the cannula was removed and replaced by an indiarubber tube, and the pain was relieved. No further operative treatment had to be adopted, and she was discharged well on February 15th, 1900.

The pus contained the streptococcus pyogenes and the diplococcus of pneumonia.

3. A. T., male, æt. 24, was admitted to the Royal Hospital for Diseases of the Chest on July 4th, 1901. For years he had suffered from chronic suppurative diseases of the middle ear on the right side, and five weeks before admission had been operated upon for suppuration in the mastoid cells. A fortnight later he was suddenly seized with acute pain in the right side, followed by a severe attack of pneumonia with pleural effusion. On admission to the hospital he was almost moribund, the temperature was subnormal, the heart was felt feebly beating in the axilla, and the pulse was feeble and irregular. A general anæsthetic was clearly impracticable, so under eucaine a cannula was inserted in the seventh space, and five pints of pus came away. The cannula was changed for an indiarubber tube on the fifth day, and without any further operative treatment the cavity healed up, and he was discharged well on August 29th.

The pus contained the streptococcus pyogenes in pure culture.

4. D. C., a female child, æt. 4, was admitted to the same hospital on February 17th, 1902, three weeks after an acute attack of pneumonia. On admission the temperature was 99°; there was marked dyspnœa; the right side of the chest was completely out of action, and bulging of the intercostal spaces was very noticeable; signs of fluid in the pleura extended up to the clavicle. The heart was found beating feebly and irregularly in the left axilla, the apex beat being in the posterior axillary line. The condition was far from a favourable one for a general anæsthetic, so a cannula was inserted into the eighth space. Rapid improvement followed, but on several occasions the tube was found blocked when the dressings were removed. So on March 3rd, A.C.E. was administered, and two inches of the eighth rib excised, and the pleural cavity opened and explored. Large masses of lymph were found lining the whole cavity; these were removed, and the cavity drained by a short indiarubber tube of three-quarters of an inch diameter. Uninterrupted convalescence followed, and the child was discharged quite well on April 17th.

The pus contained the diplococcus pneumoniæ only.

5. G. S., male, æt. 29, had suffered two years previously from an attack of pneumonia, followed by pleural effusion which at that time had necessitated aspiration many times, but the fluid was in every instance clear.

He was admitted on February 20th, 1902, having been laid up at home for five weeks with cough, pain in the right side, and dyspnœa. The temperature was 103°, and the right side of the chest was found to be full of fluid, the heart pushed over to the left, and his general condition extremely bad. An exploring needle revealed pus, and not clear fluid as was hoped; but as his condition was urgent, three pints were removed by aspiration. The relief obtained by this means was so slight that on the next day, his condition being most unfavourable for a general anæsthetic, a cannula was introduced and five pints of foul-smelling pus removed. The tube worked out on the second day and was replaced, but as this complication occurred again owing to the patient being troubled with severe cough, A.C.E. was given three days later, and three inches of rib removed and the cavity well drained,

The discharge was most profuse; the lung showed no tendency to expand, and he left the hospital *in statu quo.*

The pus contained tubercle bacilli and all kinds of septic micro-organisms, including the bacillus coli communis.

These cases illustrate the utility of this method of treatment of urgent cases of empyema. In three of them this slight operation without a general anæsthetic was sufficient to bring about the complete cure of the case. I cannot, however, and I do not wish to, claim for this method of treatment that it will be found sufficient to cure even most cases of empyema, as by far the greater number are caused by the pneumococcus, and are accompanied by a great quantity of lymph lining the walls of the abscess, and this must be removed before a cure can be hoped for (case No. 4 is a typical example of this).

But this method of treatment is of great use as a *temporary measure* in those cases in which the administration of a general anæsthetic is obviously attended with great risk. It has been shown over and over again that aspiration does not give relief in the same manner; this is well illustrated in case No. 2.

I do not think that the cannula method is suitable in tuberculous cases, as I am sure that if possible aspiration only should be resorted to, unless, as in case No. 5, the presence of septic micro-organisms make it imperative to drain the abscess, but even then it is only temporarily useful.

Occasionally there is some difficulty in keeping the tube in position owing to the restlessness of the patient or to continual coughing; this occurred in case No. 5, coughing being incessant both before and after the operation. By inserting an elastic accummulator into the tape going round the chest this complication can in most cases, I think, be avoided.

Another disadvantage to the cannula sometimes met with is the pain produced by its presence in the intercostal space, causing some pressure on the nerves, this occurred in case No. 2. This may determine the changing of the cannula for an indiarubber tube earlier than usual.

Provided that the hypodermic injection of eucaine is thorough, the introduction of the trocar and cannula produces practically no pain, but only a momentary start and catch in the breath, and so does not preclude its use in young people.

Clinical Records.

COMPLETE REMOVAL OF URINARY BLADDER.

By A. W. Mayo Robson, F.R.C.S.,
Vice-President, Royal College of Surgeons of England.

At the Manchester meeting on July 31st, Mr. Mayo Robson described a case of complete removal of the urinary bladder in a female patient, æt. 44. The operation had been performed for universal papilloma, which had been removed by supra-pubic and urethral operations on six occasions during the previous two years, but which had recurred rapidly, and was at this time causing serious loss of blood and forming a tumour reaching within three fingers' breadth of the umbilicus. The operation had been performed in the Trendelenberg position, and it was found comparatively easy to enucleate the bladder from beneath the peritoneal envelope, ligaturing the vessels as they were divided until the ureters were reached, when they were divided and transplanted into the vagina without difficulty. The urethra, which was free, was then ligatured *en masse*, and the whole bladder removed. The urine from the ureters on being collected, showed that the left kidney was already infected, and that the urine from it was scanty, purulent, and offensive, but the urine from the right kidney was fair in amount and quite healthy. For the first week the patient progressed satisfactorily, but uræmic symptoms developed in the second week, and the patient died in a state of coma on the thirteenth day.

Mr. Robson believed that this was the first case in which the entire urinary bladder had been removed in this country, and from his experience in this operation he felt that it was much more feasible than had been hitherto supposed, for the whole operation only occupied a few minutes over the hour. Had it not been for the untoward event of nephritis having already developed before operation in the left kidney, he thought that the operation would have been a complete success.

It was quite clear that nothing short of complete removal offered the patient any chance of cure, and the specimen which he was able to show to the meeting would, he thought, convince everyone that removal of the growth could only have been completely effected by taking away the entire bladder.

CASE OF ALMOST COMPLETE GASTRECTOMY.

Mr. Mayo Robson also described a case in which eighteen months ago he removed a tumour weighing one pound, and involving nearly the whole of the stomach, from a man, æt. 38, the patient having made a complete recovery and being at the present time of normal weight and in good health. The growth removed was either sarcoma or soft cancer, but unfortunately it had been lost by the porter of a pathological laboratory where it was sent for preparation and report. He described the details of the operation, which involved the removal of the entire stomach including the pylorus, the only part left being a small portion of the dome adjoining the œsophagus on the left side; this, he thought, was an important detail of the operation, for it simplified the technique and enabled a junction to be effected between the duodenum and the cardiac orifice of the stomach, the duodenum being joined to the end of the œsophagus on the right, and on the left to the small remnant of the dome of the stomach, one of the author's bone bobbins being used as a splint over which to apply two continuous sutures. The whole procedure involved only a few minutes over the hour.

Mr. Robson referred to other cases in which he had done radical removals of cancer of the stomach with signal success, immediate and remote, and he insisted on the importance of an early diagnosis and an early exploratory operation, so that such cases might be caught in time for a radical operation to be effectually performed.

Steps are being taken to arrange for a World's Congress of Tuberculosis in St. Louis, U.S.A., in 1904. So much for the Americanisation of the study of tubercle.

France.

[From our own Correspondent.]

Paris, August 10th, 1902.

Appendicitis.

At the meeting of the Académie des Sciences, M. Lannelongue spoke on appendicitis and its causes. He said before the true nature of the affection was known it was generally considered as acute peritonitis. In order to verify this assertion he obtained a list of all the cases of non-tuberculous peritonitis treated at the Hôpital Trousseau during a period of five years commencing in 1885, and also the cases of appendicitis for a similar period from 1895 to 1899, and found the number of cases were very nearly the same. For the former 470 cases were recorded, and for the latter 490.

As to the causes of the affection, they were evidently due to the bacterian flora of the appendix. A certain value should be attributed, however, to the nature of the organ (closed vessel theory), and also to the eating of too much meat. The *role* played by worms as demonstrated by Metchinkoff appeared to the speaker beyond doubt, for those parasites loaded themselves with microbes, wound the intestine and frequently penetrate the appendix.

Ectopia of the Testicle.

M. Mignon communicated three cases of ectopia of the testicle which he treated successfully by resection all the vessels of the spermatic cord, except the vas deferens. It had been thought that section of the spermatic artery would provoke atrophy of the gland, but such did not occur in his cases.

M. Lucas said that as retraction of the cord was due to fibrous tissue developed along the vessels, such favourable results as those mentioned were frequently not permanent. He operated on a case of the same nature, and after a few weeks necrosis of the testicle set in.

M. Kirmisson was of the same opinion as the last-named speaker. He cut the spermatic artery in one of his cases, and the gland atrophied gradually.

Sutured Wounds of the Heart.

Another member related an interesting case of perforating wound of the heart treated with success by suture.

A man with suicidal intent shot himself through the heart. Carried to the hospital in a collapsed condition, he was immediately examined. The heart beats were dull and laboured, presenting evident signs of effusion of blood into the pericardium. A large opening was at once made over the region and the pericardium exposed and slit, giving exit to a considerable quantity of clots. The operator, seizing the heart in his hands, discovered a small wound near the apex, with a corresponding one on the other side, marking the course of the bullet. Both wounds were sutured and a drain placed in the pericardium. Five days afterwards the drain was removed, and the man recovered rapidly.

The French Surgical Congress, 1902.

The Fifteenth Session of the French Surgical Congress will open at Paris on October 20th. Two important subjects have been noted on the programme: (1) The surgery of the heart and of the pericardium. (2) The treatment of tetanus.

Germany.

[FROM OUR OWN CORRESPONDENT.]

BERLIN, August 9th, 1902.

IT may be interesting to educationalists to know that the University of Berlin registered for summer session 5,676 students, against 5,101 matriculations for the previous summer session. In the faculty of theology there were 274, of whom 211 belonged to Prussia; law, 1,714, of whom 1,353 were Prussians; medicine, 1,018, but only 632 were Prussians; philosophy, 2,670, of whom 1,925 were Prussians.

For the summer session there were 370 females admitted, against 303 the previous corresponding summer session.

A further analysis showed that among the 1,353 law students educated in Prussia 1,316 came from the Gymnasialabiturienten, leaving only 31 from the Realgymnasium and 6 from the Oberrealschulen.

Of the 632 Prussian medicals 615 came from the Gymnasium and only 17 from the Realgymnasium. It is remarked that the Real-schul-abiturienten are low, though through what cause the critic is silent.

THE ALGEOSCOPE.

Francke, of Munich, has added another term to our diagnostic implements, but we fear it is only in name, although he is earnest in claiming "all rights." Every inflammatory centre, he affirms, is susceptible to pressure—that is, produces pain on local pressure, the chest or lungs being no exception to the rule, as the yielding of the cartilages on the ribs and sternum permits of this pressure being applied to locate pain as easily as it is among the soft structures.

The intercostal spaces are self-evident, and can easily be manipulated, as every practitioner knows, but over the hard structures it is not so clear to locate beyond a general diffuse tenderness. However, he claims no specially manufactured instrument that may be had from this or that "fabric" beyond the points of the fingers and balls of the thumbs. He considers his algeoscope to be of immense importance to the clinician, as no doubt it must, but the painting with iodine and photographing the spot is carrying this utility too far. The pleura, lung, and cardiac, according to his photographic experience, is an easy, certain, and accurate method of diagnosis.

Austria.

[FROM OUR OWN CORRESPONDENT.]

VIENNA, August 9th, 1902.

HÆMOMETER.

As the greater number of teachers have left town to air their new ideas at the various medical meetings, we must necessarily follow to have the latest to date. Jolles went to the "Naturforscher" meeting to show his hæmometer, which he has recently improved to comprehend the measurement of phosphorus as well as iron, nuclein, &c. His ferrometer is a modification of Fleischl's more expensive instrument, only graduated between 90 and 100 for immediate convenience. The most important, he said, was the estimation of the phosphorus in the blood, as on its presence depended the condition of the erythrocytes and leucocytes as well as the quantity of protein and nucleol-albumen. Under the non-albuminous substances of the cell the phosphorus is in combination with lecithin, alkalies, and even carbonic acid, which play a very active part in the blood corpuscle; therefore to know the amount of phosphorus in a given quantity of blood will be of more value in clinical diagnosis than a more accurate knowledge of the iron present. Again, the phosphorus of the cell is drawn from the fluid, and will depend on this substance in the serum, which usually contains far less in the morbid condition than the normal, whereby the nutrition suffers and the blood cell rapidly falls into decay. The nearer the hæmatic fluid can be kept to the normal state of phosphorus found in health, the more robust and salutary will the cells be found in the performance of their function.

The principle of his instrument for measuring the phosphorus in the blood depended on the intensity of the yellow colour produced with the molybdate of potassium. The standard colours were of glass attached to the "phosphometer," and can be read off immediately.

QUANTITATIVE ESTIMATION OF FATS IN DIGESTIVE SECRETIONS.

Volhard, at the same meeting, showed how the digestion of fats could be accurately measured at any instant during the process of digestion. Hitherto the results have been so varied that no real value could be put upon them for clinical purposes. This was due to the cholin with which the secretions were mixed allowing the digestive process to proceed when placed in a warm room, as the ferment that breaks the fat up went on manufacturing more than it did in the ordinary process. Volhard places the artificial mixture such as the yellow part of an egg with the gastric secretion for a given time, when he adds 75 cc. of pure ether and shakes well. Allowing it to separate he draws off an aliquot part of the clear fluid, say 50 cc., to which again he adds other 75 cc. of alcohol, and then titrates, which gives a percentage of the fat, broken up in the digestion. By this method he and Slate found that the fat is in regular proportion to the time exposed to the secretion, and confirms Schutz and Borisson's law that the product of digestion is in proportion to the square root of the ferment present.

ALBUMINOID ASSIMILATION IN THE STOMACH.

Glaessner, of Prague, brought forward another subject of equal interest on the retrogression of albumen in the stomach. After a long introduction of literature and example he gave us the result of his experiments on dogs which he fed with meat and then killed, when the mucous membrane of the organ was examined and tested and found to correspond to the stage of digestion. The cases were roughly divided into two classes, viz., examined very soon after feeding, the others between two and three hours. The stomachs that were retained for two or three hours were kept at body heat for digestive purposes. The nitrogen in the coagulable, as well as the non-coagulable substances, was estimated as the process was checked by means of the sulphate of zinc, and thus the difference was the estimated loss of albuminose nitrogen.

In the first case the mucous membrane had the property of a retrograde action of converting the albuminoid digestive product into a non-coagulable but insoluble body which corresponded to the albumose. This transformation commences immediately digestion begins and is continued regularly for eight hours. He cannot perceive any "subferment" which many other authors have observed.

THE BRITISH MEDICAL ASSOCIATION IN MANCHESTER.

REFLECTIONS AND RECOLLECTIONS.

The Manchester meeting of the British Medical Association may well claim a large measure of success, both as regards the number of visitors and the interest of the festivities; but with regard to the scientific work accomplished the gathering can hardly be termed notable. With the recasting of its constitution it will be well if the Association realises the need for a reawakening in matters scientific, and a quickening in professional concerns. Much might be done to renew interest in the essential work of the annual meeting. For long, evidences of decay have been only too apparent. The leading scientific spirits are not attracted to these annual "picnics," faddists and mere enthusiasts loom large, serious discussion of subjects needing careful analysis is oftentimes conspicuous by its absence, papers submitted are frequently of but little interest and no permanent value, and the attendance at many of the sections is deplorably meagre. The time has certainly come when in the interests of professional decency a determined effort should be made to raise the scientific work of the Association into its proper place.

It is perhaps well to consider that the President, like the King, "can do no wrong." Certainly Mr. Walter Whitehead so far has received most loyal support. It must, however, be admitted that his address was of local rather than general interest. If it is to be the President's duty to laud the past and praise the present, as regards the Association centre, many will support the suggestion that such eulogium would find the most fitting place in the Handbook.

Certainly, it is a most difficult thing to select a subject for a presidential address, or matter for occasions where the audience is not only mixed but in an essentially frivolous state of mind. Probably means may be found whereby in the future the presidential address may be restricted to terms of general welcome, the special addresses limited to a strictly professional audience, and greater opportunity given to each president of a section adequately to review the work of the preceding year. By some such reform science would gain much and social functions would be relieved of much tedium. Much praise should be given to all concerned in the organisation and conduct of the recent gathering. In spite of exceptional difficulties, much local indifference and prejudice, peculiar perplexities and many trying circumstances, the Manchester Meeting has attained to a very high level of success. But the map provided for the guidance of strangers was so inadequate as to be almost worthless.

Manchester, as is well known, is the home of many would-be reformers, whose zeal oftentimes outruns their wit, and whose methods are apt to be conspicuous by a disregard of discretion and decency. The recent gathering has not been without its heart-burnings, but, generally speaking, discordant notes have been for a time and in great measure silenced. And this is well for visitors gain scant pleasure by watching the washing of the profession's dirty linen. But a gross breach was committed by "the powers" of the Medical Guild, who, at one of the most important social functions at the Owens College, distributed copies of their "Quarterly," containing, among much that was objectionable, serious reflection on the professional conduct of the President of the Medical Society and another greatly respected member of the College staff. Such a demonstration of "Manchester ethics" is deserving of general condemnation.

Dr. Thomas Buzzard, in opening the discussion on functional and organic paralysis, dwelt on the importance of ankle clonus and Babinski's sign as strong evidences of a definite organic lesion. The various opinions expressed well illustrated the great difficulty of adequately differentiating these cases.

Professor Curatulo, of Rome, aroused considerable interest by the description and demonstration of his new speculum, whereby the female genital organs might be exposed to the germicidal action of rays from the Finsen lamp, and lupus and epithelioma of the vagina might be submitted to treatment by the electric light.

Dr. F. W. Mott's paper on the influence of syphilis as a cause of insanity gave rise to much discussion, which focussed itself into the following practical resolution:—"That the section of Psychological Medicine thinks it ought to point out that general paralysis, a very grave and frequent form of brain disease, is largely due to syphilis, and is therefore preventable. We, therefore, the members, strongly recommend that greater efforts should be taken to moderate the transmission of syphilis and to stamp it out, and we further urge that the attention of the Legislature and of public bodies should be immediately called to this important matter."

Dr. Niven, Manchester's indefatigable medical officer of health, opened the discussion on 'Preventive Measures in Tuberculosis, in the Section of Public Medicine, and the following resolution was adopted:—"That this Section considers that the time has now come for the Local Government Board to grant more extended powers for dealing with cases of tuberculosis to such local authorities as are able to show that they are in a position to undertake the necessary work."

A noteworthy feature in the Public Health Section was the participation by two distinguished laymen in the discussion on the relation of poverty to disease. Mr. Alderman MacDougall, brother of the Chairman of the London County Council, and Mr. Seabohm Rowntree, of York. Only good can come from such cooperation.

The discussions on arsenical poisoning and the use and abuse of arsenic as a medicine were somewhat barren, no new points of importance being raised. It is to be regretted that Mr. Jonathan Hutchinson's recent suggestions as to a relationship between arsenical administration and the increase of cancer were not seriously discussed.

Dr. David Lloyd Roberts delivered an interesting address at the opening of the section of Obstetrics and Gynæcology, in which he reviewed the life work of such well-known Manchester obstetric practitioners as Charles White, John Hull, Kinder Wood, Thomas Radford, Charles Clay, James Whitehead, and John Thorburn.

General approval was expressed with the annual exhibition. Unfortunately, many of the "Association authorities" still look askance at this trade representation, and instead of trying to raise its level by "artificial selection" would seem in great measure desirous of bringing about its overthrow. Certainly there is still much room for improvement. The selection of exhibits is not always judicious, and the "ways" of exhibitors might in some instances be restricted with advantage. Although all the stands were not occupied, we understand, certain firms were "refused admission." The hall, while generally suitable, lacked all æsthetic adornment. A considerable number of the exhibitors were from Manchester and its immediate district. The show of carriages was poor and the exhibit of motors miserably meagre.

THE EXHIBITION.

The thirty-fifth annual exhibition of medical works, drugs, foods, and surgical and sanitary appliances was held in the Drill Hall, near the Owens College. The exhibits had been conveniently arranged and were thoroughly representative, and the show was well attended. Although there were few absolutely new features, old and tried preparations were attractively arrayed and the newest improvements in surgical instruments were well presented. There were about 140 exhibits, and exhibitors appear well pleased with the results of their efforts. The distribution of excursion and entertainment tickets in the Exhibition Hall, although in some ways inconvenient to members, is said to have proved advantageous to exhibitors.

Where so much is worthy of notice it is impossible to afford detailed description of the various features of interest. A brief survey is all that exigencies of space will allow. The Exhibition was formally opened by the Lord Mayor of Manchester.

Rontgen Ray and Electro-Therapeutical Appliances.

The photo-therapeutic apparatus and electrical appliances attracted much attention. The exhibit of Mr. Marshall, of Hanover Square, London, illustrating the method of treatment by electrical ozone and light and the application of currents of high potential and great frequency received much notice, and members approved the arrangement whereby no patients are to be treated without a medical man's order and under his direct supervision. It may be mentioned *en passant* that an installation for treatment has just been erected at the Royal Baths, Harrogate. The radioscopic demonstrations with Gaiffe's new apparatus were largely patronised, and Messrs. H. W. Cox, Limited, exhibited Mr. Mackenzie Davidson's new mercury break and apparatus for X-ray workers, as well as a new lamp for the treatment of lupus, of which they are the makers. The Sanitas Electrical Co. exhibited the new "Dermo" lamp for "Finsen" treatment, and other novel electrical apparatus. Dr. Brouillard's ingenious apparatus for pneumatic massage was also on show. Messrs. Mottershead and Co., of Manchester, exhibited an excellent variety of constant current batteries, X-ray apparatus, and electric motors for massage; and Messrs. Midgley, Limited, had on view an ingenious acetylene surgical lamp which can be transported from place to place with ease and is always ready for use.

Drugs and Pharmaceutical Preparations.

Messrs. C. J. Hewlett and Co. made an admirable show, which included such new preparations as acetopyrine, agurin, aspirin, heroine, thialion, and urea for the treatment of tuberculosis. Messrs. Scott and Bowne were represented by their popular Emulsion, which needs no description at our hands. William Mather, Limited, presented a well selected exhibit of their far-famed plaisters. Messrs. Corbyn, Stacey, and Co., Limited, showed Antisep, to form a new preparation for the generation of formaldehyde, hæmaformene, a new scale-like form of iron prepared from ox blood, and spirit nucis inglandis, a useful antispasmodic and prophylactic in morning sickness. The Anglo-American and Continental Pharmaceutical Co. indicated the benefits of kügloids, benzo-kinone, and other preparations. Arthur and Co. showed bromaurum, hydraurum, tamopumilio, and other useful agents. Burgoyne, Burbidges and Co. indicated the advantages of acoin, creosotal, xeroform, and some interesting new silver preparations. Zimmer and Co. brought forward euquinine, a tasteless quinine; eunatrol, eupyrine, and many important synthetic compounds. The Angier Chemical Co. were not backward in displaying their much-favoured "Angier's Emulsion." E. Summer and Co. made a great show of both pharmaceutical preparations and surgical appliances. The Bayer Co., Limited, had a large display of such important synthetic preparations as aristol, hedonal, heroin, protargol, trional, and also showed various somatose products. Hans Hoff exhibited "Ironal" and his well known malt extract. Parke Davis and Co. had an elaborate exhibit, which included Adrenalin, the active principle of the suprarenal gland, serums, toxins, medicinal elixirs, and their standardised fluid extracts. James Woolley, Sons and Co., Limited, the well-known Manchester firm, made a large and very complete exhibit, which included their sanitary powders, akolethe, phenate of soda solution, and antiseptic fumigating tapers. They also showed surgical instruments and electrical apparatus Mr. W. Martindale, of "Extra-pharmacopœia" fame, also made a very comprehensive show, which included excellent sterilised dressings and suprarenal extracts in tablet form, urea apparatus, and his well-known urine test cases. Messrs. Oppenheimer, Son and Co. showed their "palatinoids" and various concentrated liquors; Messrs. Fairchild, Brothers and Foster reminded us that the "Fairchild" products were still widely known and wisely used. Eucryl exhibited their useful toilet preparations; B. Kühn showed that much appreciated antiseptic Chinosol, papain decoction, and many organo-therapeutical preparations; Messrs. Wyleys, of Coventry, drew attention to their "Tropela," or compressed lozenges, useful ophthalmic ointment tubes, sapolette powder, which is a special soap in powder, rendered antiseptic by the addition of thymol; their standardised tinctures, and other well-known preparations; Duncan, Flockhart and Co. showed their widely-known chloroform and other products. The Chas. Phillips Chemical Co. introduced a hydrated oxide of magnesium under the name of "Milk of Magnesia."

Foods, Meat Extracts, Malt Extracts, &c.

There was perhaps a larger display in this class than in any other. "Plasmon," a recent introduction, the value of which is now so generally recognised by the profession in wasting diseases, anæmia, rickets, &c., was shown in its varied forms of powder, biscuits, cocoa and meat extracts. Messrs. Brand's popular meat extracts, meat juice, meat jellies, and lozenges and fever food were also there, and Mellin's Food Co. were represented by their renowned infants and invalids foods, food biscuits, food chocolate and cod-liver oil emulsion; and the new Essence of Mutton, "Hipi," now almost as universally known and appreciated as a change in the diet of invalids as beef extracts, was exhibited by Messrs. Nelson, Dale and Co.

Van Abbott and Sons presented foods suitable for diabetics, dyspeptics and invalids. The Universal Digestive Tea Co. urged the special virtues of their particular infusions; the Myosin Albumen Meat Extract Co. advocated the use of "Mamesin." Cosenza and Co. were there with Maggi's soups and essences. Nestlé would not allow his deservedly popular brand of condensed milk to fall into oblivion. Keen, Robinson and Co. urged the benefits of Robinson's prepared barley and patent groats as a trustworthy and nutritious diet for infants, and of Keen's mustard for adults. "Strenbo" was advertised as an advantageous meat extract. "Albene," a pure vegetable fat, was advocated by Messrs. Broomfield and Co. for all cooking and baking purposes. Billon's Ovo Lecithin was also exhibited as a new food for delicate children, and consists of stearic, oleic, and palmitic lecithin.

Callard and Co,, the invalid food specialists, made a good show, and the Manhu diabetic foods were again exhibited, and Feltoe and Stower's lime and lemon juice preparations were frequently sampled. Liebig's Extract of Meat Co. showed "Lemco," "Oxo" and "Peptarnis." The Maltine Manufacturing Co. showed their various popular malt extracts and products, and Messrs. Carnrick and Co. their well-known beef peptonoids. C. Dreyer and Co. sought attention for Swiss Brand Milk. The British Somatose Co. had an elaborate exhibit of Somatose made from beef, Iron-Somatose and Milk-Somatose, the merits of which are now well recognised by medical men; and "Virol" could not well be overlooked. This, as our readers are aware, is an emulsion of red bone marrow, malt extract, eggs and lime-juice, rich in the nitrogenous and bone-forming elements.

Various forms of mineral waters were exhibited, the most important being those of Messrs. Jewsbury and Brown, "Camwal," the Apollinaris Company, Messrs. Oppel and Company, and Messrs. Ingram and Royle. Wines by Messrs. Stephen Smith, Murray, and Sons and the South Australian Government bonded wines of the "Orion" brand. The indiscriminate use of alcoholic drinks is wisely being much restricted, but undoubtedly there is still a lack of pleasant and beneficial beverages which may adequately take their place. Manufacturers of recent years have seriously faced the problem and done much to show that non-intoxicating drinks may be provided which shall be popular and free from deleterious properties. Among the new high-class beverages is "Vinrube," which is manufactured by Camwal, Limited, and was much approved at the meeting. It claims to be made from ripe fruit, is flavoured like "claret cup," has an appearance resembling sparkling red Burgundy, and is exceeding refreshing and very palatable.

Disinfectants and various sanitary compounds were exhibited by such firms as "Jeyes" and the Izal Company. "Oowana Soap" was declared to be "supplied by special desire to H.M.S. *Ophir* for the use of H.R.H. the Duke of York and suite," and Messrs. Midgley, Limited, of Manchester, had a most interesting exhibit of medicated soaps and bath products.

Messrs. Doulton (of Doulton ware fame) had on view some novelties in the way of baths, lavatories, and water-closets. The special Hospital Bath, on wheels for the purpose of moving about from ward to ward or bed to bed, has a special wheel brake, so that the bath can be kept as firm when in use as a fixed one. Another novelty of considerable importance to surgeons was an operating lavatory with basin and top in one piece, with a waste pipe controlled by the foot. Their bath fittings for asylum use are also excellent, and so designed that they can only be actuated by a key in charge of the attendant.

Surgical Instruments and Appliances.

This branch was not so extensively represented as on some prior occasions; nevertheless, there were more than sufficient for all practical purposes. Messrs. Allen and Hanburys, who have recently added the manufacture of surgical instruments to their food and drug departments, had a large exhibit of instruments, cabinets, operation tables, bed supports, surgical electric motors, sterilisers, &c. Messrs. Down Bros. had a most attractive display, including the novel feature of an aseptic operating theatre with up-to-date furniture complete, beside recently introduced or improved surgical instruments. Messrs. Weiss and Son showed a new operation table in nickelled steel, improved instrument cabinets, sterilisers, &c., whilst the Surgical Supply Association of Manchester, which is reputed to be formed on co-operative lines by medical men, and managed by medical men, had a very extensive display of surgical instruments, trusses, bandages, poison bottles and sundries, even to crutches. Messrs. Mayer and Meltzer exhibited a portable surgical motor, designed especially for mastoid surgery and another for general surgery in hospital theatres, which attracted considerable attention. The Holborn Surgical Instrument Co. had an extensive display, and some novel and decidedly interesting cabinet and folding baths were on view by the Gem Supplies Co. Messrs. Paté, Burke and Co. exhibited their new surgical dressing, "Petanelle," in which, by a peculiarity of manufacture, the wool is rendered lighter and more absorbent than other surgical dressings. The further advantage is claimed for this material in that being derived from peat it possesses natural antiseptic and deodorant properties, and may be left on a wound with safety much longer than ordinary dressings Scotland was represented in this section by Messrs. Gardner and Son, of Edinburgh, who showed Annandale's, Chiene's, Croom's, Simpson's, and other surgical instruments, and by the Medical Supply Association of Edinburgh.

The O'Connor Extension Co. showed their excellent patent appliances for the lame, including the new support for flat foot. The "Domen" Belts Co. were represented by some particularly well and scientifically made abdominal belts and stoop-cure appliances.

Various forms of bedstead, sanitary and heating appliances were also shown. Many carriages were exhibited, chiefly by local firms. Unfortunately the exhibit of motors was inadequate.

Many of the newest books were open for examination on the stalls of such well-known publishers as Baillière, Tindall and Cox, Macmillan and Co., W. B. Saunders and Co., J. B. Lippincott and Co., William Green and Sons, John Wright and Co, of Bristol, and Rebman, Limited.

The Exhibition was worthy of the occasion. It should prove of much service to members. The catalogue was convenient in shape and will be of value for reference.

The Operating Theatres.

CENTRAL LONDON THROAT AND EAR HOSPITAL.

Temporo-Sphenoidal Abscess.—Dr. Percy Jakins operated on a girl, æt. 3½, who had been admitted into the hospital for an offensive discharge from the right ear of three years' duration; the child had on and off complained of headache, and at times had seemed stupid. However, for the first few days after admittance the headache disappeared, and she seemed brighter, but on the sixth day she became drowsy, with constant yawning and shrieking, the pupils being widely dilated; an erythematous rash appeared over the chest, right knee, and ankle. The child was immediately put under chloroform, and a semi-lunar incision was made over the right mastoid, the skin was reflected with the periosteum; the antrum was exposed, together with the mastoid cells, which only contained a little recent lymph. The lateral sinus was next exposed, it was found patent and perfectly healthy. The skull was trephined over the temporo sphenoidal region, the dura mater was slightly bulging, this was divided, and a long, thin knife carefully passed into the brain; pus immediately escaped. The wound was enlarged with a brain pus seeker, when a fair amount of pus welled up; a drainage tube was then inserted, and the patient removed to bed. Dr. Jakins said this was evidently a case of a temporo-sphenoidal abscess, and remarked that this was another sad instance which showed the danger that parents run in not having ear disease attended to at once, without waiting until serious cerebral symptoms manifest themselves; any patient, he thought, who has an offensive discharge from one or both ears, which does not improve on treatment, and is accompanied by headache, nausea, and vertigo, ought to be operated on without delay. With regard to the operation itself, he drew attention to the fact that, considering that the discharge had lasted for three years, there was so little disease found in the antrum and in the mastoid cells; the disease, he considered, must have attacked the roof of the petrous bone and so infected the temporo-sphenoidal lobe.

FRENCH HOSPITAL AND DISPENSARY.

An Old-fashioned Ovariotomy.—Mr. O'Callaghan operated on a woman (a sister) who was suffering from a large tumour; she had noticed it for about a year; it had grown very rapidly within the last year, and filled the whole abdomen, resembling a full-time pregnancy. Within the last six months she had repeated attacks of localised peritonitic pains, which was the sole cause of her seeking surgical advice. The diagnosis was that of a multilocular ovarian cyst, complicated with adhesions, as there was no mobility in the tumour. The abdomen was opened in the middle line by an incision four inches long, the hand passed into the abdomen, and the many adhesions were broken down. A trocar was plunged into the cyst, and a considerable amount of fluid drawn off, but the trabeculæ were so numerous and full of gelatinous fluid that Mr. O'Callaghan was obliged to empty the larger portion of the tumour with his hand. On delivering it the pedicle was found to be very thick, necessitating tying in three portions. Some portion of the fluid having got into the peritoneum, and the oozing from the broken down adhesions being rather profuse, it was thought advisable to leave in a Bantock's glass drain for twenty-four hours. Mr. O'Callaghan said that this ovariotomy was interesting, inasmuch that nowadays one rarely met with a cyst which had grown so large, and it was instructive because it showed the importance of prompt operation when any ovarian enlargement was discovered. As this patient, owing to her position in life (that of a sister of a religious order) had allowed this large tumour to grow to a dangerous extent, as the history and many adhesions showed, and proved by the fact that she had had several very acute attacks of peritonitis, therefore it was interesting to point out that had she been in the ordinary walk of life her condition must have been discovered long before the present time, saving her a vast amount of pain and suffering. With regard to drainage, Mr. O'Callaghan remarked that the best maxim was "when in doubt, drain," and that the best drain in deep abdominal work was a glass one. The glass drain was removed in twenty-four hours. The patient's pulse and temperature remained normal throughout, and she left hospital about a fortnight after operation.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 13, 1902.

THE EARLY DIAGNOSIS OF MALIGNANT DISEASE OF THE UTERUS.

Professor Japp Sinclair's eloquent Address in Obstetrics, at the recent meeting of the British Medical Association, which we published last week, will attract the attention of the profession to the dire disease which so far has almost completely baffled the skill of the specialist. We do not propose to follow him in his comparisons between the value of the various methods of research which must be followed in the future, or to express an opinion as to the probable route which will lead us to that "Promised Land" of ætiological certainty of which he speaks. To reach that land, a way must first be paved with clinical facts and the results of pathological investigation, and, though the opportunity for laying a stone in this pavement occurs now and then to every member of our profession, it will be some time before the road is finished. But, in the immediate present, another and equally important opportunity of benefiting the sufferers from uterine cancer is of frequent occurrence in the practice of every medical man. As Professor Sinclair tells us, our hopes of immediate amelioration of uterine cancer rest on surgery, and the possibility of the adoption of surgical methods rests in the hands of the general body of medical practitioners. The infrequency with which cases of malignant disease of the uterus, in which it is possible to adopt radical surgical methods, are now seen by the operating specialist, will in the future, when a more satisfactory state of things is reached, be almost unintelligible. The general public, at present, recognise that uterine cancer is an insidious and terrible disease, the medical profession recognise the vital importance of early diagnosis, and yet, as Professor Sinclair states, the proportion of operable cases which are seen in hospitals is about 18 per cent. The causes of this, as given by Professor Sinclair, are worthy of the most constant repetition. Briefly stated, they are: the ignorance of the patient; the lack of due insistence on the part of general practitioners on the importance of immediate local examination in suspicious cases; and popular delusions. Patients are not so well trained and disciplined in these countries as in Continental Europe, and hence, even if they consult a medical man, they hesitate to lay all their symptoms before him. Medical practitioners, even if the premonitory symptoms of cancer are hinted at or perhaps actually told, are too apt to allow themselves to be infected by the optimism of the patient, and are too ready to postpone the local examination until the boasted efficacies of some lauded drug have been found wanting. And, as if the natural ignorance of the patient and the optimism of the medical practitioner were not enough, popular delusions cloud the minds of the one and increase the difficulties of the other. Notions concerning "the change of life," "climacteric hæmorrhages," and the universality of pain in cancer, join in confusing the mind of the patient and in preventing her from submitting to the necessary examination. Indeed, we should be afraid to say how recently has the possibility of climacteric hæmorrhages been more present in the minds of many of our profession than the probability of cancer. The medical profession cannot justly be reproached because the ætiology and cure of cancer have not been discovered. Advances in our knowledge have come and will come, but they are bound to be slow. Can we, however, entirely ignore the reproach that but some 18 per cent. of cases of uterine cancer are seen whilst they are operable? So long as a medical man assumes the responsibility of treating by palliative measures cases which present suspicious symptoms, without first adopting such steps as will alone enable him to determine definitely that malignant disease is not present, so long can no inconsiderable share in the discredit which surrounds the 82 per cent. of cases which might have been cured fall to the lot of the medical profession.

THE POOR-LAW AND PADDED ROOM.

As a whole the Poor-law system of Great Britain, we are fain to believe, is administered on lines that are more or less progressive. The methods in vogue at the present day, for instance, are infinitely in advance of those that prevailed a couple of generations ago. At the same time there are blots on the present system that can only be removed at the cost of unceasing vigilance. As to many of the defects of Poor-law infirmary administration, we have felt it our duty to state our opinion in former years that not a few of them have arisen from want of proper inspection. The personal honour and competence of His Majesty's Local Government Board Inspectors are of an unassailable standard, but their methods of inspection cannot be regarded as satisfactory when tested by results. What system would have permitted such scandals as that of those of the Newton Abbott Workhouse to go on unchecked year after year? The blame for this *laisser faire* policy lies probably not so much with the inspectors as with the Local Government Board, which is content with advising when it should insist. On several occasions we have called the attention of the Board to deaths that have taken place in padded rooms attached to infirmaries in the East of London. We have made emphatic inquiries as to the absence of resident medical men, the insufficient staff of attendants, the use of restraint in improper cases, and we have strongly urged the necessity of independent and searching official inquiry. What has been the response to our representations we know not, but last week the fact that such evils still exist was proved by what the newspapers describe as "A Padded-room Tragedy" in West Ham Infirmary. The facts of the case are simple. The patient, suffering from enteric fever, was admitted to the infirmary. As deceased was delirious he was ordered a sleeping draught, and medical directions given that if he were noisy he could be put in the padded room. Deceased was later placed in the padded room and found at 1.20 a.m. with his head hanging through a hole in the door, so nearly suffocated that he died shortly after being removed from the door. The attendant appears to have made an effort to summon medical assistance, but the telephonic communication was stopped. As a matter of fact no medical man was summoned. Here we have the familiar ghastly story once more. The idea of putting a typhoid patient in a padded room in itself constitutes an act of barbarism worthy of mediæval times. The facts of the case seem almost to warrant the assumption that the lack of a proper staff of nurses prompted the action of the medical man in sanctioning the use of the padded room. The fact that the medical officer was presumably a busy general practitioner living away from the infirmary would naturally render attendants chary of summoning him to attend patients in the wards. The jury found that deceased died of suffocation, and advised that an inquiry be held into the conduct of the attendant. We are inclined to go further, and to say that the safety of the public demands a stringent examination by the Local Government Board into the circumstances of the present death, and also into the whole system of padded rooms, medical attendance, and nursing staff of the Poor-law infirmaries. We venture to hope that some member of Parliament will ask the President of the Local Government Board for a return of all the deaths that have taken place in padded rooms under their supervision during the past few years, with full details as to the name and the duties of attendants, workhouse master, nature of illness of deceased, cause of death and the system of medical attendance, and name of medical officer. It is time that an end was put once and for all to a recurrent scandal unworthy of the humane spirit of the age.

LONGEVITY.

"There is a Dr. John P. Wood, of Coffeyville, Kansas, now past his hundredth year, and still engaged in the practice of his profession. On the Piscataway Farm, in New Jersey, lives Noah Raby, said to be one hundred and twenty-nine years old." So writes Roger S. Tracy, formerly Registrar of Records in the Department of Health, New York City, in a highly interesting paper which bears the title, "Longevity in Our Time." That many lives are now prolonged, which under the conditions of a quarter of a century ago would have been inevitably lost, is an unquestionable fact. The introduction of vaccination and other forms of preventive and curative *inoculation*, including, of course, antitoxins; the discovery of anæsthesia and of antisepsis, and the recognition of the importance of cleanliness, personal and circumferential, have accomplished what may fairly be described as scientific miracles in the preservation of human life. The progress of the epidemics of infectious and contagious diseases has been effectively checked; and the surgeon now fearlessly invades every cavity and recess of the human body, when the desirability of mechanical interference happens to be indicated. In considering the question of the actual increase of longevity, there are several aspects in which it may be viewed. Do we mean by increased longevity that a larger proportion of individuals attain to the centenarian rank, or that the average age at the time of death has become greater? Are we to understand that each individual lives longer than he would have lived in the conditions of one or more centuries ago? The fact is, indeed, undeniable that the "death-rate" has of recent years been decreasing in all the civilised countries. Now the mortality in every community varies with age. In infancy it is very high, in childhood very low, from ten to fifteen years of age it is lower than at any other time of life; it then continues low, but with gradual increase, until middle age is passed, after which it rises rapidly in every succeeding decade. We find that, according to the common consensus of statisticians, the only trustworthy means of conducting this inquiry to the formation of an accurate opinion is by examination of the life-tables, by which is ascertained the "expectation of life" at each year of age. Such tables form the basis of all the calculations of insurance actuaries, and are constructed from the mean population for a series of years at the various ages, and the mean annual number of deaths at the corresponding ages. Now it is known that the contagious, infectious, and gastro-intestinal diseases, which furnish so large a proportion of fatal cases in infancy and early life, do not cause even 5 per cent. of deaths after the age of forty-five. On the other hand, the deaths of persons over forty-five from alcoholism, cancer, phthisis, diabetes, old age, apoplexy, disease of the heart, and blood-vessels, of the respiratory and digestive organs, of the kidneys and bladder, and from violence, constitute about 90 per cent. of all such deaths. In fact, the deaths from some of these causes, in spite of all our modern sanitation, have increased at such a rate as to cause much misgiving. In the city of New York the death-rate from cancer and from diseases of the kidneys (commonly known as Bright's disease) has doubled in thirty years . . . so that, in some respects, the saving of life among the young, by the partial suppression of contagious and septic diseases, tends to be counterbalanced by an increased mortality after middle life from diseases which depend more upon personal habits than upon external causes. The specimen life-tables furnished by Mr. Tracy show that during the past half-century the "expectation of life" for males at birth has *increased* by nearly *four years*. The lowering of the death-rate and the increase of the expectation of life, do not, however, necessarily imply increased longevity of the race. The saving of so many fragile young lives has the necessary effect of throwing forward into the later periods of life a large number of weakly persons, and the average stamina of the population is consequently reduced, so that when the decline of life begins, and the physical powers decay, this undue proportion of weakly lives tends to increase the mortality at advanced ages. In connection with such observations it is highly instructive as well as interesting to note that: "The Ghetto in Rome was the healthiest quarter of the city, and at the present day the Jewish quarter of New York, the most crowded and, until recently, the dirtiest part of the town, has the lowest death-rate." This Mr. Tracy attributes to the elimination of the weak during the terrible ordeals of the past two thousand years, together with their "rigid adherence to the admirable sanitary code of Moses." Mr. Tracy's conclusions are, upon the whole, encouraging: "It is certain that the average man has a better chance of living long than he ever did before in the history of the world." And he considers that "the rosiest outlook is that for the diminution of the ravages of consumption, the 'great white plague' of temperate climates." And when we are told that in the city of New York alone half-a-dozen reputed centenarians die every year, we feel some assurance that even the extremest form of pressure in the struggle for existence does not cut off all hope of attaining the honoured and much-coveted distinction of centenarianism.

The Manchester Royal Infirmary poll of the trustees has resulted in the very decisive majority of 351, out of 757 papers returned, against rebuilding on the present site.

* * *

We regret to announce the death of Deputy-Surg.-Gen. J. Watts, of the Army Medical Department (retired), on Friday at Upper Norwood, after a long illness, in his sixty-ninth year. He joined the medical service of the Army in April, 1855, and served in the Indian Mutiny campaign of 1857-58. He was placed on the retired list with the rank of deputy-surgeon-general in 1884.

Notes on Current Topics.

The King and the Coronation.

The important national ceremony of the Coronation has come and gone, and the unemotional Englishman has turned once again to the even tenour of his citizen affairs. As we ventured to predict a week ago would be the case, His Majesty King Edward the Seventh was enabled to withstand the fatigues of the ceremonial in an entirely satisfactory manner. Despite the fact that his Majesty's face bore the unmistakable trace of past illness, the popular verdict was that for an invalid he looked remarkably well. For this happy issue from a serious surgical operation he has to thank in a great measure the enduring constitution, which is, happily, a kind of birthright to the average Britisher. Then, again, without undue self-praise, we may say that he has been in the hands of the greatest surgeon of a great surgical era. The brilliant certainty of the first surgical step has been equalled, if not surpassed, by the less showy bu supremely momentous decision to allow the illustrious patient to go through the postponed ceremony in the early days of his convalescence. Whatever may be the environment of his Majesty in the near future, the nation may rest content in the wisdom of the surgical advice that will doubtless guide his actions.

The King's Prizes.

The competition for the best designs for a sanatorium for the treatment of tuberculous patients in connection with the Sir Ernest Cassel Fund has been decided. No less than 180 competitors sent in their essays to the Arbitration Committee, which consisted of Sir William Broadbent, Sir Douglas Powell, Sir Hermann Weber, and Dr. Theodore Williams. The first prize of £500, on their advice, has been bestowed by the King on Dr. Arthur Latham, of St. George's Hospital and the Brompton Hospital for Consumption, in association with the architect, Mr. William West, of London. The second prize of £200 is awarded to Dr. F. J. Wethered, associated with Messrs. Law and Allen, architects; and the third prize of £100 to Dr. E. C. Morland, of St. Bartholomew's Hospital, associated with Mr. G. Morland as architect. Four other essays are mentioned as being of great excellence; they were sent by Dr. P. S. Hichens (Northampton), Dr. Turban (Davos), Dr. Jane Walker (London), and Dr. J. P. Willis (Bexhill).

The Statutory Duties of Cabmen.

Is a cabman bound by the law to carry a fare at all times and under all circumstances? If so every citizen, at some time or other, must have had the opportunity of turning the legal tables upon cab-drivers who have taken no notice of his uplifted umbrella or his excited shouts. Is a cabman bound to take up any person regardless of the damage that may be done to his cab by the wet, muddy, or otherwise objectionable state of the fare? We trow not. The law actually fines a cabman who carries any person suffering from a notifiable infectious disorder. such as small-pox, and so admits the principle that it is not for the public weal that every citizen should have the universal right of "user" of all public vehicles. The Birmingham magistrates interpret the law on the wider basis apparently, for they recently inflicted a smart fine on a cabman who refused to carry a disabled child to the hospital. We believe, although, of course, we speak as non-legal citizens, that the cabman acted within his rights. Some years ago a woman jumped over the suspension bridge at Clifton, and fell in the mud. By some miracle she was not killed on the spot. A passing cab was hailed, but he refused unless someone would pay for the damage to his vehicle. If it be compulsory for a cabman to carry persons in such a state that his cab must be injured, then the responsibility for the damage must also be defined. It is inconceivable that the Legislature would compel the cab driver to pay for damages of that kind out of his own pocket. The Birmingham magistrates could hardly have considered the bearing of the philanthropy they were enforcing at other people s cost.

Public Vaccinators and Patients' Payments.

The medical profession throughout the United Kingdom is interested in the question of the exact position of a public vaccinator with regard to private patients who may wish to pay a fee for vaccination. The Board of Guardians at St. German's, near Plymouth, have had an official correspondence with the Local Government Board upon the matter. The central authority point out that there is nothing to prevent a public vaccinator from performing the operation and receiving a fee in his private capacity. The Board, however, disapproves of any action of the Guardians that would have the effect of suggesting to the public that vaccination and revaccination are not free to all residents within their union, irrespective of social position, who desire the services of the vaccinator in his public capacity. From this official declaration it seems that a public vaccinator is justified in taking fees from anyone who wishes to pay him. At the same time in performing a private operation, he would be committing an illegal act if he were to use Government lymph for the purpose.

The Modification of Milk in Infant Feeding.

The difficulties which arise in the artificial feeding of infants owing to the unstable composition of milk, as delivered to the consumer, are sometimes so apparently insuperable that this most excellent of all infant foods is abandoned in favour of some proprietary preparation. Professor Rotch, of Harvard University, has, at the recent meeting of the British Medical Association, drawn attention to the various ways in which these difficulties can be overcome, as well as to the importance of so doing. The exact analytical methods of modern chemistry render it now possible to be more precise in our definitions and in our formulary than was possible when the empirical methods of the nurse were universal. To copy nature satisfactorily, the physician must be able to vary the percentage of proximate principles in the substitute food he prescribes, according to the requirements of the infant. Professor Rotch gave a most interesting account of the organisation in connection with the Gordon-Walker milk laboratories in America, and pointed out the various essentials which are necessary. The first of these was to secure pure milk of good quality, of known quantitative value, and free from bacterial contamination; the second was the safe transmission of such milk without change from the source of supply to the individual infant; and the third was the capacity to vary the composition of the food as the judgment of the physician directed. We have always considered that the only method by which proper feeding can be secured to the infants of the very poor, is by the establishment of duly supervised dairies from which fresh milk can be obtained in forms suitable for infants of various ages. Such dairies should be instituted and supervised by the municipal authorities, and, if properly conducted, could be made self-supporting. We should like to draw the attention of the various philanthropic societies which are interested in such matters, to Professor Rotch's valuable paper.

Atmospheric Electricity.

THE homely and inexhaustible subject of "the weather" is almost as important and interesting to the medical man as to the meteorologist and the farmer. To its variations the average member of our profession owes a great deal of the material for his practice, as does the meteorologist for his scientific investigation, and the farmer for the rewards of his annual course of labour and speculation. One of the most important items in the list of meteorological phenomena is, of course, atmospheric electricity. There is always a demonstrable amount of electricity present in the air, but its kind, as well as its quantity, varies from time to time. The results of recent investigation go to show that careful systematic observation of the electricity of the atmosphere may be made to furnish a trustworthy index to the character of coming weather. Mr. C. T. R. Wilson, who has made careful investigations in this department of physical science, in connection with the Meteorological Office, has found that when rain is falling, or about to fall, the electrometer always indicates the presence of the opposite kind of electricity to that which prevailed when the weather was steadily fine. The rule is practically universal, that reversal of the prevailing atmospheric electricity is always connected with change from fair to rainy weather. Moisture seems to condense more readily upon particles charged with one kind of electricity than on those charge with the other. Accordingly, the idea has suggested itself that the control of atmospheric electricity might prove the means to effect climatic changes beneficial both to agriculture and to public health. Having regard to the colossal conquests which science has effected in the electric dominion during the past quarter of a century, the hope might not prove altogether Utopian that in this direction something may still be done towards the control of phthisis and chronic rheumatism, the great endemic plagues of our over-moistened islands.

Decaying Woodwork.

ALL of us know the smell—often faint and musty, but always unmistakable—of decaying woodwork. It is to be found perhaps in its most typical form in the ancient chambers of some inns, where the wood of panelled walls and flooring has been solid enough to withstand the wear and tear of perhaps a couple of centuries or more. Not all of us, however, are alive to the inner meaning of the changes of which the mustiness is the outward and sensible sign. Indeed, before the disclosures of modern bacteriology were available no adequate scientific explanation was forthcoming of the phenomenon. Nowadays we know that the peculiar micro-organisms of decaying wood are the responsible agents of the destruction. There can be no reasonable doubt that decaying wood, or the conditions that accompany that decomposition, are injurious to the health of the human being. Decay is to a great extent prevented in wooden surfaces other than the floor by preventing the access of air and moisture by coats of paint or varnish. In the floor, however, the conditions of moisture from frequent washing of rough and polished surfaces favourable to the growth and lodgment of bacteria are present. Perhaps the most urgently needed reform in dwelling-houses at present is the introduction of smooth and impermeable floors.

Safety Flannelettes.

CORONERS have for long denounced the dangers arising from the use of flannelette. Every medical man knows the suffering entailed on children by the employment of this inflammable material. During the years 1899 and 1900 inquests were held on the bodies of 1,684 young children whose deaths had resulted from burning, and in 1,425 of these cases the fire in the grate which caused the catastrophe was without a guard. But flannelette is cheap and convenient, and many mothers are poor and ignorant. Medical men may talk, but it has been left to manufacturers to act, and at last it would seem that a satisfactory advance has been made in solving the problem. At the recent Exhibition in connection with the British Medical Association, the well-known firm of Messrs. Whipp, Brothers and Tod demonstrated the properties of their new non-inflammable flannelette, which is registered under the convenient title of "Non-Flam." The experiments, which were closely watched by large numbers of medical men, conclusively proved that the new material will not readily ignite either before or after washing, and that it never flashes. The nature of the material is not altered as regards its softness and comfort, and it does not in any way injure the skin. We venture to think that in this new preparation of cotton a means of removing, or at least greatly reducing, a danger to child life has been discovered, and since this "Non-Flam." flannelette can be supplied at a cost very little above that of the now popular but terribly dangerous material, it should speedily become universal. Medical men would do well to obtain some of the new safety flannelette and test its properties for themselves.

A Burglar Posing as Medical Man.

The plans of an ingenious burglar have recently been disclosed by the police in a prosecution at Liscard. The gentleman in question is described as an habitual thief. In order to cloak his proceedings he took rooms in a furnished house and stated he was a medical man attached to the Stanley Hospital, Liverpool. In pursuance of that alleged occupation he was in the habit of going out at night and not returning until the next morning. Unfortunately for himself he was not content with out-of-door operations but annexed the watch of a fellow lodger. The incident reads like a page from a sensational romance.

Canada: the New Nursery of the Human Race.

The great Dominion of Canada is rapidly becoming the refuge of the restless and adventurous, or of the rejected, citizens of the other nations. From even the prosperous and progressive neighbouring republic of the United States there has been an annual exodus of thousands during the past few years. This includes large numbers of Mormons; and the phenomenal industry, by which this very "peculiar people" have always been distinguished, is, we are informed, making the desert of their settlement—in Alberta—to, literally, blossom as the rose. Ten years ago the Census reported 86 per cent. of the inhabitants of the great Dominion as native-born; while 10 per cent. were born elsewhere under the British flag, and only 3 per cent. were absolute foreigners. We have now no less than forty nationalities represented among the immigrants of recent years: Arabs, Austrians, Belgians, Bohemians, Chinese, Danes, "Doukhobors," Dutch, English, Finns, French, Galicians, Germans, Greeks, Hebrews, Hungarians, Icelanders, Irish, Italians, Moldavians, Newfoundlanders, Norwegians, Poles, Portuguese, Roumanians, Russians, Ruthenians, Scotch, Slovacks, Spaniards, Stundists, Swedes, Swiss, Syrians, United-Staters, Welsh, West Indians, and so on. The *Doukhobors* are a sect of Russian Quakers of whom nearly 10,000 came to Canada in a body in 1899. Among the immigrants are also reckoned 30,000 Galicians and 40,000 Slavs; thus are the most widely diversified peoples coming to find their Land of Liberty and Home of Refuge in the vast prairies of Western Canada. What an immense and productive nursery in the future development of the human race has thus been opened out! Hundreds of villages are now springing up on those previously unbounded plains; agriculture, stock-raising, and road-making are progressing with giant strides. And here we are bound to have some of the most important problems in the evolution of the human race, now in their embryonic stage of existence, gradually developing for the future study of the legislator, the ethnologist, the moralist, and—the pathologist.

Itch or Eczema—or Both?

It is curious how slow the public is to realise that a medical man cannot be punished for a simple error of professional judgment Before any legal action can be sustained against him on the ground of mistaken diagnosis or treatment it must be shown that there has been also either gross negligence or want of an ordinary and reasonable amount of skill. In the face of this firmly-established principle, any client must be extremely ill-advised if he bring an action for malpraxis against a medical man except upon the clearest evidence of culpable negligence or ignorance. In a case tried recently at the Birmingham Assizes, the plaintiff, named Furstenant, a coal contractor, was wanting in both the essentials named, to say nothing of the minor qualities of charity and reasonableness. In August last, so the story ran, he suffered from a skin eruption, for which he consulted Dr. Tomlinson, who treated him for eczema. In October, finding he was not cured, he went to another medical man, who told him he was suffering from itch. Later, his wife contracted the complaint. Mr. Tomlinson, on the other hand, stated that he had the idea of itch in his mind on first seeing plaintiff, but he failed to discover any sign of that disease. The jury found an immediate verdict in favour of Mr. Tomlinson. Everyone conversant with medical matters knows the extreme difficulty that often surrounds the diagnosis of itch when masked with severe or generalised eczema. Indeed, every skin specialist falls into the pit sooner or later. It is only by a process of exclusion that a definite diagnosis can be arrived at in many chronic cases, a kind of inference that is necessarily slow.

A New Qualification for Medical Men.

The average candidate for the post of Poor-law medical officer is, we fear, a most optimistic person, who considers that he can sustain life, and work hard, on the honour conferred by his appointment, and who sometimes even thanks the country farmer who has appointed him for having done so. We wonder, therefore, how he will regard the new qualification which he is called upon to possess. The Board of Guardians of the Tullamore Dispensary District have announced that at the forthcoming election of a Poor-law medical officer they will give the preference to a candidate who is a Member of the United Irish League. That is to say, it will not suffice that a candidate for a medical position shall possess all the needed medical qualifications, but he must also place his political conscience in the hands of the guardians of the poor who appoint him. In return for the possession of the necessary qualifications—both those required by law and those not required—the Guardians will award him a salary of £100 per annum, occupy his time fully with the work for which this salary is paid, and then allow him to live—if he can. Now, as we are not a political journal we are in entire ignorance as to what may be the meaning of the demand of the Tullamore Board of Guardians, but we do know that to demand of a candidate for a post—the salary of which is paid out of the public purse—that he be a member of a political organisation, lawful or unlawful, is an insult to the medical profession. Further, it is a devotion of the public money to the furtherance of the objects of a political organisation in a manner which is far from right, and we fancy illegal. The election in question will take place before this journal is published, but in the event of the adherence of the guardians to the terms of their advertisement, we call upon the Local Government Board to declare the election void, and if they do not see their way to adopting such a step we trust the Irish Medical Association will call the attention of Parliament to the matter.

Delenda est Anopheles!

The opening attacks of the war to the death which has been commenced against the pestiferous mosquito are reported in encouraging terms from the opposite side of the Atlantic. "The result of the successful work in 1901 on Center Island, near Oyster Bay, has led to a plan of action covering a territory about fifteen miles long and five miles wide, and preliminary work has already been completed. Professor Charles B. Davenport and Mr. Frank E. Lutz, of the University of Chicago, each with an assistant, have made an entomological survey of the region, locating every water surface and determining and reporting the kind and extent of larvæ in the breeding-places." This is certainly going to work with the energy and enthusiasm which "deserve success"; and which, we venture to add, in the present instance must ultimately secure it. As in the case of all other great movements which have been initiated for the genuine improvement of the physical welfare of humanity, this work on Center Island at first received a great deal of opposition from the inhabitants, who were to be the permanent gainers by the transactions involved. The work has so far consisted mainly of the carrying out of drainage and the application of petroleum. The latter is the temporary agent of relief and requires but slight application. The use of the former must be thorough, for it is to it that we must look for the permanent cure. Eight oil stations were established on the island, and at each one or two barrels of petroleum were arranged on a platform in the shade of trees. From each, the petrolier having armed himself with his knapsack sprayer filled with petroleum from the barrel, sallied forth to scatter destruction among the enemy. Needless to say that the carrying out of this campaign to a successful issue is a laborious task. Water is absolutely necessary for the breeding of the mosquito, and the knowledge of this fact furnishes a light which illuminates the whole position. And we are glad to say that the reports of the results being obtained are thoroughly encouraging. Mr. Henry Clay Weeks, an authoritative expert on the subject, announces that "The writer has been informed that, in other years, to drive along the borders of this marsh was a perilous undertaking to man and beast, but he walked over it many times during and after the work, and did not encounter a single mosquito." The drainage, of course, was a troublesome and expensive proceeding; but the result well repays. The mosquito must disappear from the borders of civilisation: in time from the face of the earth. Delenda est!—our title *must be* correct in its latinity, as *the* enemy is *female.*

Smoke Nuisance in America.

The smoke nuisance has been recently receiving a good deal of municipal attention in some of the large cities of the United States. New York, indeed, has since the application of its smoke-destroying law in 1898, enjoyed the immense physical advantage of existing within and beneath an aerial atmosphere which is probably the clearest and purest of any great city in the world. The railroads entering New York are compelled to use coke instead of soft coal for their engines, to bring the trains within and to withdraw them from, the limits of the Metropolis. At present date, Boston exists under a smoke law which permits the production of black smoke for five minutes at a time, and for an aggregate period of three hours in twelve. This law is, of course, quite insufficient for the production of even an approximately clear atmosphere; and, accordingly, an agitation has been set on foot to procure a law compelling every manufactory to prevent or consume its smoke. In the earlier periods of the history of the great New England cities, the large proportion of water power, and, subsequently, the use of an anthracite coal, kept them practically free from the plague of sootiness. The introduction of soft coal in recent years has had the effect of making American city atmospheres distressfully like those of the "old country." The discussion on the smoke question in Boston has also had the good effect of bringing into prominence the fact that the combustion of their own soot will be actual economy to manufacturers; and that the better preservation of buildings, trees, and so on, to say nothing of human health, will be a source of genuine saving to the whole community.

Crises in Diseases.

The following statement hails from an American source:—"Long ago much importance was attached by medical men to a certain day in the course of a disease as being critical, that is, as marking the probable occurrence of the crisis. . . . The blind belief prevailed for centuries, in spite of the rude refutation that it must often have met in every day experience; in our times, however, it has altogether been abandoned." Has it, altogether? We do not know that the average case-history of typhoid and pneumonia, to take two of the most common diseases, does not occupy a certain given time, and does not present a certain sequence of events, among which is a strong tendency for the morbid process to have run through its more acute stage by the twenty-first and ninth days respectively. Whether this constitutes a crisis in the meaning of the *New York Medical Journal* is one thing, but in Europe we are still content to look upon it as such. The writer speaks airily of the rude refutation that this "blind belief" must often have been met with in every day experience, but he conveniently says nothing of the more numerous cases in which the "blind belief" was confirmed. Less happy still, however, is the writer when he remarks further on: "In the case of infectious diseases, including the septic contamination that may follow wounds, we feel simply that the patient's chances of recovery improve with each day. . . ." Since when has the "septic contamination that may follow wounds" been included with infectious diseases? And whoever would expect to find a crisis in the case of a poisoned wound? This fashion of sneering at everything in the past is evidently not always happy in its deductions.

The Part Played by Vaccination in Preventing the Spread of Small-pox.

AN interesting and important discussion at the recent meeting of the British Medical Association, on the precise part played by vaccination as carried out in this country in preventing the spread of small-pox, resulted in the adoption of two important resolutions. The first of these reads:—"That inasmuch as there is strong evidence to show that the effect of infant vaccination has largely lost its influence after ten or twelve years, it is desirable that all children should be revaccinated at the age of 12 years." The second was as follows:—"That in the opinion of this section the duties of the administration of the Vaccination Acts should be transferred from the Poor-law authorities to the county and county borough authorities." The evidence which was brought forward by the speakers in support of the former of these resolutions would go far to convince any honest and at the same time sane opponent of vaccination of his wrong-headedness. We venture to say that never in the history of any prophylactic measure has such definite proof of utility been obtained, but still vaccination is opposed, not merely by isolated individuals here and there, but by bodies of men supposed to be representative. It is generally recognised that if a series of identical phenomena possess but one circumstance in common, that circumstance is the cause of the phenomena. Still, though the confessed diminution in the size and virulence of small-pox epidemics has but one attendant circumstance common to all epidemics, *i.e.*, the adoption of vaccination and revaccination, the British public as a body appears to be opposed to the recognition of vaccination as the cause of the diminution. In other words, for reasons which to the intelligent observer are non-apparent, a certain section of the British public prefers to court the mortality which attended the Gloucester epidemic than to ensure the almost complete immunity of an Irish city, where the anti-vaccinationist does not exist.

The Teaching of Surgery.

DR. HERBERT L. BURRELL, of Boston, who wrote in January, 1901, a circular letter to the different medical schools in the world asking for information regarding the methods of teaching surgery, recently read a paper before the American Surgical Association on what, in his opinion, should be the essentials of instruction in this subject. Dr. Burrell classified the information he had received from the different medical schools under no less than eighteen heads. His conclusion is that "America in surgery stands to-day sorely in need of men who are equipped and fitted by scientific methods to advance surgery. Students should be taught along scientific lines by instructors who are completely equipped." It is not quite plain what the writer means by "men who are equipped and fitted by scientific methods," unless it is men bristling with the latest forms of surgical appliances. However, it is not safe to assume that he means exactly what his English would convey, inasmuch as in another place he states that a student's education should include, among other things, "the minimum required fundamental knowledge." Somehow, "fundamental knowledge" sounds as if it was something of which one could not have too much.

Examination Fever.

A CONTINENTAL authority has recently shown that candidates for examination are wont to lose flesh when undergoing that ordeal, a conclusion which will not surprise the medical world. We have little doubt that a careful physiological investigation would show a variety of further changes in the nervous and other systems of the body. The effect of a high standard examination is much the same as that of an infectious fever. The appetite fails, the sufferer is sleepless, he becomes pale, listless, and loses flesh rapidly. Many a time have we noted these changes in a robust, country-bred young man, who has developed the signs of examination fever as surely as if he had been down with a bad attack of typhoid. Fortunately the convalescence in these cases is as rapid. Five or six weeks spent at the seaside or in the country suffices to bring round the wasted frame of the examinee to the *status quo ante*. Were it otherwise, the moral burden of high standard examiners—heavy as it already is, if we are to believe the heavy indictments launched against them—would become unbearable. The way that students regain their health after these most unwholesome intellectual contests affords a striking testimony to the stamina of British youth.

A New Cure for Glycosuria.

To the long list of remedies for glycosuria is now added the infusion of the dried leaf of the eucalyptus. The fresh leaf has been used with benefit for some years past in Australia, and it occurred to Dr. Faulds to try the effect of the infusion of the dry leaf. He writes very favourably of its therapeutic effects. Of forty-six cases treated fifteen are reported as cured. The curative properties must be resident in the leaf, for the oil has no curative action on the disease; neither has the eucalyptus gum, which almost altogether consists of tannic acid.

PERSONAL.

SIR DYCE DUCKWORTH gives the opening address of the Owens College Medical School at the beginning of the Winter Session in October next.

THE Bissit Hawkins Gold Medal has been awarded by the Royal College of Physicians of London to William Henry Power, F.R.S., Principal Medical Officer to the Local Government Board.

MAJOR RONALD ROSS has received a shower of recognitions of his distinguished researches on the transmission of malaria by mosquitoes. Among the latest is the Cameron prize in therapeutics of the University of Edinburgh.

WE are reminded that the Law Fund is not yet closed, and that a meeting of its supporters will be held shortly. Dr. Paramore, of Gordon Square, London, W.C., the honorary secretary, will be pleased to acknowledge any subscriptions.

DR. BACCELLI has recently been presented with a presentation shield in appreciation of his discovery of the aphtha epizoötica of cattle. This distinguished member of the medical profession holds the portfolio of the Ministry of Agriculture with a seat in the Italian Cabinet.

DR. DAVID FERRIER has been appointed by the Royal College of Physicians of London, Harveian Lecturer for the year; Dr. Cullingworth, Bradshaw Lecturer; Dr. Grünbaum, Gulstonian Lecturer; Dr. T. R. Glynn, Lumleian Lecturer for 1903; and Dr. J. R. Bradford, Croonian Lecturer for 1904.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

SCOTLAND.

[FROM OUR OWN CORRESPONDENT.]

GRADUATION CEREMONIAL AT EDINBURGH UNIVERSITY.

THIS year's graduation ceremony will be memorable in the annals of the University as the occasion of the conferring of honorary degrees on the Colonial Premiers. It is singularly fitting that this, perhaps the most cosmopolitan of British Universities, so far, at least, as its undergraduates are concerned, should take the lead in honouring the Colonial Premiers in this fashion, inasmuch as the Colonies send it annually a large proportion of its students. The degree of LL.D. was conferred on General the Right Honourable Lord Grenfell, Governor of Malta; the Right Honourable Sir Joseph West Ridgeway, Governor of Ceylon; Sir Edmund Barton, Prime Minister of the Australian Commonwealth; the Right Honourable Richard John Seddon, Prime Minister of New Zealand; Lieutenant-Colonel the Right Hon. Sir Albert Henry Hime, Premier of Natal; the Right Hon. Sir Robert Bond, Premier of Newfoundland; Sir Walter Joseph Sendall, Governor of British Guiana; Sir William Macgregor, Governor of Lagos; the Right Hon. Sir John Gordon Sprigg, Premier of Cape Colony; and the Right Hon. Sir Wilfrid Laurier, Prime Minister of the Dominion of Canada. Of Sir William Macgregor the Dean of the Faculty of Law said:—"Our illustrious compatriot furnishes in his life and work an inspiriting illustration of what can be accomplished by a Scottish graduate of medicine. Having taken his degree in the University of Aberdeen, he began his career as a Resident in the Glasgow Royal Infirmary. Thereafter he held a succession of medical appointments under the Government at the Seychelles, Mauritius, and Fiji, and I would mention here that it has not been by the physicians' arts alone that he has proved a benefactor, for he holds the Albert and Clarke medals for gallantry in saving life at sea." After the recipients of honorary degrees had been capped, various degrees in medicine, science and arts were conferred, and prizes and scholarships awarded. The degree of M.D. was granted to sixty-seven graduates, and that of M.B., Ch.B., to a hundred and forty-one, in both instances a number of women being among the recipients. The customary address was delivered by Professor Schäfer, who prefaced his speech by sundry remarks on the best methods of employing the earlier years of professional life, and the altruistic spirit which the practice of medicine tends to produce in the characters of those pursuing it. Successful leaders of armies were recompensed, and rightly so, not only with titles, but with still more tangible marks of gratitude and appreciation. But though "A wise physician, skill'd our wounds to heal, Is more than armies to the publick weal," almost the only instance of pecuniary reward being conferred on a medical man for public service was the Parliamentary grant of £30,000 to Jenner for the introduction of vaccination. Speaking of the changes in medical problems which the increasing knowledge of the last half of the nineteenth century brought with it, Professor Schäfer said that those whom he was addressing were fortunate in that it was not probable that during their lifetime would there occur any such complete change in the manner of viewing nearly all the problems of medicine and surgery as had been the case in that of their predecessors of his (the speaker's) own generation. The doctrine of the parasitic nature of disease bears a no less important relation to medicine than the principle established by Darwin does to biology. The problems of health and disease must be attacked in the future, as in the past, by the method of experiment, for clinical and pathological observations in man are, as a rule, by themselves insufficient for the definite establishment of any important principle in medicine. The problems which are at present offering themselves most prominently for solution are of a chemical nature. The chemical characters of the products which the disease-parasites form in the body, their physiological action, and their mode of formation, and the chemical characters, modes of formation, and actions of the ante-products which are formed by the organism for purposes of defence are all questions awaiting solution. The subject is one requiring a thorough mastery both of chemistry and physiology and pathology, a combination which is almost unknown, in this country at least. The difficulty must be met by the establishment of chairs of physiological and pathological chemistry, to be occupied by men who are primarily chemists, but who also have some knowledge at least of physiology. In this matter, as in others, University College, London, has been a pioneer, a chair of pathological chemistry having been established there in 1896, in which the first occupant, Professor Vaughan Harley, notwithstanding deficient accommodation, equipment, and finances, has done most excellent work. With this exception there has hitherto been no chair in any British

University dealing with this important branch of medical science, although the Universities of Oxford and Cambridge have established lectureships on physiological chemistry. But it has been left to one of the newest Universities—University College, Liverpool—to lead the van in this movement, and to endow a chair of biological chemistry, through the munificence of one of the citizens of Liverpool. The need for such a chair at Edinburgh is very evident, and no one entertains a doubt that when we recognise and state our needs the means of providing them will be forthcoming.

It may be mentioned as an interesting feature of this graduation that for the first time in living memory one of the warders carried the ancient unwieldy bâton or staff, which is perhaps several hundred years old. It is made of rosewood, is silver mounted, and has on it a shield with the University arms. It was discovered lately by the chief janitor, stowed away among some lumber, and was, through the intervention of Sir Ludovic Grant and the University Clerk, restored and again made fit to be carried in a procession.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

GARLIC AND PHTHISIS.

To the Editor of The Medical Press and Circular.

Sir,—It may be of interest to Dr. Minchin to learn that my experiences with garlic, like his, have been favourable. I first drew attention to the value of garlic (especially in cases of diluted bronchi (with fetid expectoration) in a clinical lecture delivered at University College in January, 1894. This lecture was published in the *Clinical Journal* for January 31st, 1894, and was incorporated in a volume entitled "Nervous Affections of the Hand and Other Clinical Studies," published by Smith and Elder in 1897. The remarks on garlic will be found on pp. 274—280. I am inclined to say that I have more often seen improvement occur after garlic than after any other internal remedy.

I give the crude, raw vegetable, chopped up in salad, or bread sauce, or beef tea. If the patient dislikes the flavour I give it in rice-paper cachets. Many hospital patients relish garlic immensely, while others loathe it. To these latter it seldom proves useful.

I have read Dr. Minchin's letter with much interest, and have thought that he and your readers might be glad to have a reference to the experiences of others.

I am, Sir, yours truly,
G. V. Poore.

24a, Portland Place, W., August 10th, 1902.

PROLONGED NITROUS OXIDE ANÆSTHESIA.

To the Editor of The Medical Press and Circular.

Sir,—I have read with great interest Dr. Kirkpatrick's able paper on "Prolonged Nitrous Oxide Anæsthesia by Paterson's Method," which was published in The Medical Press and Circular of July 16th. Dr. Kirkpatrick's modification of Paterson's apparatus is obviously a very great improvement on the original, the disadvantages of which Dr. Kirkpatrick describes so lucidly, and which therefore I need not repeat. I feel bound, however, to point out that the underlying principle of either method is a wrong one, inasmuch as it depends upon the necessity of supplying gas at the anterior nares under considerable pressure; for, to use Dr. Kirkpatrick's own words, "I had to return to Paterson's original model of the nose-piece, so that by increasing the pressure in the gas bag I was able to raise the gas pressure in the naso-pharynx to such an extent that the soft palate was pushed forward against the tongue, so closing the mouth-way from behind. . ." This means that all the cavities of the nose, with its accessory chambers and sinuses, are forcibly distended with gas, with the attendant risk of setting up inflammation, particularly if there already be a condition of catarrh existing at the time of the administration, for it would thus be an easy matter to blow disease germs from the nasal meatus into the frontal sinuses or maxillary antra. The upper meatus are not used in normal breathing, but when gas or air is forced into these passages under pressure, a very unpleasant feeling is experienced in these regions during the administration, which often causes shouting, struggling, or other signs of excitement, not infrequently followed by acute frontal headache after recovery from the anæsthetic. Not only this, but there is also the great disadvantage of the necessity to keep the nose-piece fitting accurately, which hampers both operator and anæsthetist; while the apparatus is distinctly in the way of the former, particularly while operating on the front of the maxilla or upon the right side of the mandible.

Although I am fully alive to the excellent anæsthesia it is possible to attain, in many cases, by Dr. Kirkpatrick's method, yet I am strongly of opinion that the principle is not a good one, and should not be adopted so long as there are means of obtaining as good results without the attendant risks to which I have alluded.

I am, Sir, yours truly,
Harvey G. Gilliard.

30, Wilton Place, S.W., July 31st, 1902.

PROFESSOR McHARDY'S ESCAPE.

To the Editor of The Medical Press and Circular.

Sir,—In your last issue you alluded briefly to the stirring adventure of Mr. McHardy. The news of the incident had already reached the world through the medium of the lay newspapers, and from the latter point of view I venture to ask permission to append a few remarks. In these days when everything that savours of undue publicity with regard to the social life of medical men is unsparingly condemned, it behoves us to inquire into the cause of such publicity when it occurs, with a view to future prevention. In this case it must have been clearly due to the indiscretion of Mr. Philip Herbert, who rescued his friend from a watery grave. Mr. Herbert's discretion, however, has apparently not been equalled by his caution. The information to the newspaper men must have presumably come from him, for it is hardly likely that any of the yachtsmen would have communicated with the Press. The information must have come from someone intimate with Mr. McHardy's private affairs, for it was announced to the world not only that the rescued gentleman was professor of ophthalmology at King's College, but also that he held the post of senior surgeon of the Royal Eye Hospital, St. George's Circus, London. The wonder is that this incautious friend did not add to the completeness of the record by giving the Professor's private address, with particulars of past appointments.

Heaven preserve us from our friends!

I am, Sir, yours truly,
Honi Soit.

London, August 8th, 1902.

P.S.—The statements as to the present appointments I have seen both in a London evening paper and in the *Yorkshire Daily Post*. The latter says the Professor will be well enough to resume professional work after the holidays.

SUNSTROKE AND DIETARY.

To the Editor of The Medical Press and Circular.

Sir,—Pray allow me one word of correction as regards my letter on this subject and your comment thereon.

The word "thin" was omitted before "cranial bones," which made all the difference, as my point was that in India, although the bones of the skull were thin and the hair fine and closely plastered down (in contrast with the woolly-haired, thick-skulled negro races), yet sunstroke was uncommon among the hardy classes who ate sparingly and took but little fluid.

I do not suggest that sunstroke is *common* among horses, but that while it occurs not unfrequently among highly-fed draught horses in cities like New York and London, it is almost unknown among animals in their hardy wild state.

The problem therefore that I raise is whether the "microbic cause" of sunstroke answers the difficulties of the case, and I only modestly suggest that the presence of much fluid in the tissues, which canbe considerably affected by extreme temperatures, may have also some predisposing cause.

It appears to me that there is sufficient probability to make it worth while suggesting that fruitarianism and total abstinence may have an effect on tending to prevent sunstroke, in so far as they encourage the use of a drier dietary and discourage the imbibition of excess of liquids.

I have the honour to be, your obedient servant,
Josiah Oldfield, D.C.L. (Oxon.), M.R.C.S.
5, Harley Street, W.

Obituary.

SURG.-LIEUT.-COL. H. LAMB, R.A.M.C.

We regret to announce the death of Surg.-Lieut.-Col. H. Lamb, of the Royal Army Medical Corps, who died on Saturday of angina pectoris, at Thorpe Lodge, Shirley, Southampton, at the age of sixty-four. He joined the medical service of the Army in October, 1860. He served during the New Zealand War and the Zulu Wars, for both of which campaigns he had the medal.

Literature.

CLIMATE AND BATHS OF GREAT BRITAIN. (*a*)

The first chapter in this book, by Dr. Wm. Ewart, treats of the climate of London and Middlesex. The information is well condensed and full of interest and encouragement for all dwellers in London and its vicinity.

London air, water, and fogs are all subjects very fully discussed, and some interesting results as to variations in purity of the air and causation of fog are brought to the reader's notice. The meteorological tables, extending over ten years, represent much labour and observation, and bring out numerous comparative facts as to temperature, rainfall, &c. The first chapter would form a very valuable little book if issued in separate form.

The second chapter, on the climate of the East Coast, by Dr. Wm. Murrell, treats of the climates of Essex, Suffolk, Norfolk, and part of Lincolnshire. The rising watering places of these counties receive fair and impartial notice.

In this, as well as in subsequent chapters, it will be noticed how the authors, while not unmindful to record average temperatures, elevation, dryness of soil and air, and so forth, give also information as to the diseases prevalent in each locality. They also indicate the cases that are not likely to do well at certain stations.

The bracing tonic air of the East Coast is getting a good name for curing cases of phthisis. At Mundesley-on-Sea is the well-known sanatorium of Dr. Burton-Fanning, where the open-air treatment is most thoroughly carried out. In cases where there is tendency to bronchial spasm and asthma this East Coast air is often too stimulating, while the more sedative air of London is well known often to relieve markedly. We rather wonder that this is not alluded to by the writer. Dr. Plowright, of the West Norfolk and Lynn Hospital, gives the death-rate from phthisis as 1·1 per 1,000 of population; further statistics show that this disease is more influenced as to prevalence by moisture of the soil than by its special composition.

With regard to the prevalence of calculus, Dr. Plowright finds that in High Norfolk, that is east of the Ouse, one case occurs in 2·5 square miles; while in Marshland, west of the river, one case occurs in 8·2 square miles. In Marshland the natural water supply contains a large amount of salt, and salt increases the solubility of uric acid.

The climatology of Lancashire, by Dr. Maguire; of the Midland counties, by Dr. Horton Smith; and of Northumberland, Yorkshire and the Lake District, by Drs. Lazarus Barlow and Brooksbank, teaches much that is worth learning by all.

North Wales falls to the share of Dr. Leech, and Dr. Theodore Williams treats very completely of the South Wales climates. The tables of rainfall and of isothermal lines given in this article bear witness to the care and industry of the writer.

The concluding part of the book, from the pen of Sir John Moore, describes fully the climate of Ireland, and Dr. Norman Moore gives a short chapter on the mineral springs of that country.

As the Report of the Royal Medical and Chirurgical Society of London this work is one of great value and utility.

The reports are drawn out with care, being based on replies to circular letters sent out to medical men in the various localities, and the work of arranging the information thus obtained must have been considerable. The tables and maps have been executed with attention and deserve all praise.

ELEMENTARY ZOOLOGY. (*a*)

The fact that the date of the preface to this second issue of Mr. Masterman's "Zoology" follows that of the preface to the first edition by an interval of less than one year is, probably, the very best practical testimony to the fact that the text-book before us has been found to fulfil—definitely and usefully—the function for which it was intended by its author when he undertook the preparation. As the writer very sensibly remarks in the preface to the first issue of this work: "It is questionable whether it is possible to provide the student with a book which can entirely take the place of oral instruction." He judiciously emphasises the importance of practical instruction; and, of course, everyone who knows anything of any scientific subject knows that it is only as an adjunct to practical instruction that any text-book can be used with genuine profit. It is with this fact in his mind's eye that he tells us: "Hence I have written the descriptions of the types in this book, and in the majority of cases have drawn the figures, with the animals (or the parts of them) before me, in order that the work may be found an aid to dissection as well as a preparation for written examinations." It is, of course, somewhat humiliating—if not aggravating—to a specialist to have to admit, as in the present instance, that "our whole system of zoological classification is in such confusion that the adoption of any particular scheme appears at present to be purely arbitrary." But we consider that he has acted with the best discretion by maintaining "a very definite limit to the introduction of new features of classification or even of new types." Having regard to the wants of students, for whom it was primarily intended, we consider that the author has made a most judicious and conscientious selection of his material; and that, used in connection with the oral and practical instruction - in which we will presume that the author is as finished an adept as he is in the book-wright department—the present volume must be allowed to offer a very fair approximation to the features of the hopelessly unattainable perfect scientific text-book. In this second edition the author has inserted about fifty new figures, and added a short description of a type of rotifera. A careful revision of the text and former figures has, however, enabled him to keep the volume to practically the same bulk as before, without omission of anything essential. With such indications of its general features we leave this attractive manual—looking forward to the appearance of a third edition in 1903.

(*a*) "The Climate and Baths of Great Britain, being the Report of a Committee of the Royal Medical and Chirurgical Society of London." By C. Theodore Williams, M.D., Chairman, P. Horton Smith, Hon. Secretary. Vol. II.—Climates of London, Central and Northern England and Ireland. London: Macmillan and Co., Ltd. New York: The Macmillan Society. 1902. Price 12s. 6d.

(*a*) "Elementary Text-book of Zoology." By Arthur T. Masterman, M.A.Cantab., D.Sc.Lond., D.Sc.St.And., F.R.S.E., Lecturer on Zoology and on Biology in the School of Medicine of the Royal College, Edinburgh. Second Edition. With 441 Illustrations. Crown 8vo. Pp. xxiv. and 628. Price 12s. net. Edinburgh: E. and S. Livingstone. 1902.

THE HEALTH ASPECTS OF LINEN WORKERS. (*a*)

This portly octavo of x. and 463 pages contains the reported results of a skilled professional investigation of the conditions of existence connected with the manufacture of linen in Belgium. The verdict arrived at is that the occupation of those employed "dans les filatures de lin" is an insalubrious one, but that the degree of unhealthiness varies greatly with the particular employment in which the individual is engaged. In their conclusions the authors of this report condemn employment at too early an age, working at night and on the seventh day, resumption of labour too soon after parturition, and the careless ventilation of the apartments in which the combing is carried out. "Le travail de cardage est le plus insalubre de ceux qui s'exécutent dans les linières." We are also told that "Le filage du lin à l'eau chaude est une opération très insalubre; les filles et les femmes qui s'exécutent sont, en grande majorité, atteintes d'un certain degré d'anémie." The work is richly illustrated by a series of photo-lithographs of the special departments of linen factories. And there are excellent ones of "Eczéma lichénoïde des fileuses de lin (mains en griffes)," "Dermite ulcéreuse des fileuses de lin (degré léger)," " . . (degré moyen)," " . . degré extrême," "Retraction permanente de l'auriculaire," and "Ulcere traumatique des fileuses de lin." The volume is, throughout, a very instructive one.

THE PERITONEUM. (*b*)

This portly and well-printed octavo is the first instalment of what promises to be by far the most exhaustive work on the peritoneum which the world has yet seen. It is well written and copiously illustrated. The author—a most refreshing characteristic, which carries the over-read reviewer breezily over the pages of a new scientific book—has evidently dealt with his subject *con amore*. The *occasional* author who does so does not himself feel weary of his self-imposed task; and, accordingly, does not convey that very infectious yawn to his reader. By the way, we cannot help observing in this connection that to us, year by year as we are growing older, that "occasional" author to whom we have just referred is growing more and more occasional with every successive revolution of the earth in its orbit; in fact, we have now come to regard his appearance as an accident. At his present rate of progressive disappearance we should be disposed to prophesy his complete extinction by the middle of the twentieth century.

In his preface the present writer tells us that "The present volume in the outcome of a half-dozen years of personal labour in experiments on the peritoneum, in the study of its anatomy and in microscopical research. The labours of others have been consulted and credited." And we cordially congratulate Dr. Robinson on the result of his labours, as so displayed to the scientific world. The contents of this volume surely represent the well-spent efforts of half-a-dozen years. It is only those of us who have made some efforts in parallel directions who can ever form even an approximately just opinion on such questions.

The first chapter of the volume before us is devoted, we are glad to see, to a "Historical Sketch." The "occasional" medical practitioner who possesses a tolerable knowledge of the history of his profession is perhaps even a rarer specimen than the "occasional" scientific writer to whom we have already referred. We consider that no man—or woman—should be allowed to practice our profession who is not *devoted* to it in the highest sense of the word. And how anyone can be devoted to so engrossing an object, without making every effort to know its past history as well as its present attractions, is far more than we can comprehend.

Dr. Robinson has given us a very interesting sketch of the work of the principal contributors to the common fund of our knowledge of the structure and functions of the peritoneum. We found it a little strange, however, not to meet the name of Winslow, nor any allusion to his "foramen," in a historical sketch of the progress of the discovery of peritoneal structure.

In the second chapter, the author opens to us the wide field of the "Anatomy and Physiology of the Peritoneum," which he treats with the hand of a past master of his subject. The third chapter deals with the "Endothelia of the Free Peritoneal Surface"; the fourth with "Subperitoneal Tissue"; the fifth with the "Blood Vessels of the Peritoneum"; the sixth with its "Lymphatics"; the seventh with its "Nerves"; the eighth with its "Physiology"; the ninth with "The Technique"; and the tenth and concluding chapter is devoted to "A Résumé of the Physiology of the Peritoneum." A splendidly-exhaustive "Bibliography" of the subject concludes the volume. In the necessarily narrow limits of a notice like the present it is idle to attempt to criticise in detail the individual sections of the work of a master who has left his readers so little to criticise. The work is exhaustive, and, so far as can be, original; and we trust that it will be read as widely as it deserves. Its subject is of the greatest practical as well as theoretical importance; the historic cases of the late President M'Kinley and of his Majesty Edward VII. have emphasised its importance to the last degree—to professional readers on both sides of the Atlantic.

SCHAFER'S ESSENTIALS OF HISTOLOGY. (*a*)

The sixth edition of Professor Schäfer's well-known manual will prove even more valuable to students than the former editions. It has been considerably enlarged, partly by additions to the text and partly by the provision of new illustrations. A full description of the central nervous system, in accordance with the results of modern investigations, has been added. The book is so well known that it is unnecessary to review it at length. For the convenience of students it is divided into forty-six divisions, each of which is intended to serve as a separate "lesson." As it is an elementary work, all unimportant details are wisely omitted, and, as a rule, references to authorities are similarly treated, while only those methods are recommended which experience has demonstrated to be of value. The illustrations are particularly good, and are well chosen. Professor Schäfer's work will long continue to be the standard text-book for students.

NEW BOOKS AND NEW EDITIONS.

The following have been received since the publication of our last monthly list:—

Baillière, Tindall, and Cox (London and Dublin).

Death and Sudden Death. By Prof. P. Brouardel and F. Lucas Benham, M.D., B.S.Lond. Second Edition. Pp. 336. Price 10s. 6d. net.

A Manual of Practical Medical Electricity, the Rontgen Rays and Finsen Light. By Dawson Turner, B.A., M.D., F.R.C.P.E. Third Edition. revised and enlarged (University Series). Pp. 396, with 168 illustrations. Price 7s. 6d. net.

Aids to Practical Dispensing. By C. J. S. Thompson. Third Edition, enlarged, with illustrations (Students' Aids Series). Pp. 92. Price 2s. 6d. cloth, 2s. paper.

Aids to Dental Anatomy and Physiology. Second Edition. By Arthur S. Underwood, M.R.C.S., L.D.S., Professor of Dental Surgery in King's College, London. Pp. 124. Price 2s. 6d.

The Journal of Obstetrics and Gynæcology. Vol. I., January to June, 1902. Pp. 713.

Chicago Medical Book Company (Chicago).

The Peritoneum. By Byron Robinson, B.S., M.D. Pp. 510, with 247 illustrations.

J. and A. Churchill (London).

A Textbook of Medicine. Vol. II. By Charles Hilton Fagge, M.D., F.R.C.P., and Philip Henry Pye-Smith, M.D., F.R.S. Fourth Edition in two volumes. Pp. 1050. Price 21s.

A Manual of Bacteriology, Clinical and Applied, with an Appendix on Bacterial Remedies, &c. By Richard T. Hewlett, M.D.

(*a*) "Les Filatures de Lin." Etude d'Hygiène Professionelle. Rapport d'Enquète présenté a M. le Ministre de l'Industrie et du Travail. Par le Dr. D. Gilbert, Inspecteur-Médecin du Travail à l'Administration centrale. Bruxelles. 1902.

(*b*) "The Peritoneum." By Byron Robinson, B.S., M.D.Chicago, Ill. Part I.—Histology and Physiology. With 247 illustrations. Imperial 8vo. Pp. 406, with 103 pp. of Bibliography. Chicago: Chicago Medical Book Company. 1899.

(*a*) "The Essentials of Histology, Descriptive and Practical, for the Use of Students." By E. A. Schäfer, LL.D., F.R.S., Professor of Physiology in the University of Edinburgh; formerly Jodrell Professor of Physiology in University College, London. Sixth Edition. Pp. xi. and 416, with 463 illustrations. London: Longmans, Green and Co. 1902.

M.R.C.P., D.P.H. (London). Second Edition. Pp. 533. Price 12s. 6d.

The Force of Mind or the Mental Factor in Medicine. By Alfred T. Schofield, M.D., M.R.C.S., &c. Pp. 309. Price 5s. net.

Clinical Essays and Lectures. By Howard Marsh, F.R.C.S. Pp. 303. Price 7s. 6d.

St. Thomas's Hospital Reports. New Series. Edited by Dr. Hector Mackenzie and Mr. G. H. Makins, C.B. Pp. 445. Calendar 127. Price 8s. 6d.

Ventilation as a Dynamical Problem. By W. N. Shaw, F.R S. Pp. 24. Price 1s.

Henry J. Glaisher (London).

Eczema and its Congeners. By Edward Blake, M.D. Pp. 136. Price 3s. 6d.

Small-pox: How it is Spread and How it may be Prevented. By James Wallace, M.A., M.D.Aberd. Pp. 69. Price 2s. 6d. net.

Charles Griffin and Company, Limited (London).

Diseases of the Organs of Respiration. By Samuel West, M.A., M.D., F.R.C.P. In two volumes, with numerous diagrams and illustrations. Pp. 913. Price 36s. net.

Lippincott and Company (Philadelphia and London).

A Practical Treatise on Small-pox. Illustrated by Coloured Photographs from Life. By G. H. Fox, A.M., M.D., with Collaborators. In Two Parts.

International Clinics. Vol. I. Edited by Henry W. Cattell, A.M., M.D., with Collaborators. Pp. 306. Price 10s. 6d.

Longmans, Green and Company (London).

Report of the Yellow Fever Expedition to Para of the Liverpool School of Tropical Medicine and Medical Parasitology. By H. E. Durham. With illustrations and plate. Pp. 79. Price 7s. 6d.

Macmillan and Company (New York and London).

Clinical Psychiatry, a Text-book for Students and Physicians. By A. Ross Defendorf, M.D., of Yale. Pp. 420. Price 16s.

Young J. Pentland (Edinburgh and London).

Text-book of Anatomy. Edited by D. J. Cunningham, F.R.S. Illustrated with 824 wood engravings from original drawings, many in colours. Pp. 1309.

The Edinburgh Medical Journal. Edited by G. A. Gibson, M D., F.R.C P. Ed., and Alexis Thomson, M.D., F.R.C.S.Ed. Vol. XI. Pp. 604.

W. B. Saunders and Company (Philadelphia and London).

Illustrated Medical Dictionary, with Pronunciations, Derivation and Definition. By W. A. N. Dorland, A.M., M.D. Pp. 770. Price 19s.

Scottish Medical and Surgical Journal, Limited.

Vol. X. January to June. 1902. Edited by Norman Walker, M.D., F.R.C.P.Ed., and Harold J. Stiles, M.B., F.R.C.S.Ed.

Smith, Elder, and Company (London).

Medical Lectures and Aphorisms. By Samuel Gee, M.D., F.R.C.P. Pp. 296. Price 6s.

Societe d'Editions Scientifiques (Paris).

De la Conjunctivite Granuleuse. Par le Dr. Z. Hourmougiades. Avec Preface par le Dr. A. Trousseau.

Williams and Norgate (London).

Studies in Heterogenesis. By H. Charlton Bastian, F.R.S., M.D. Part Second, with 244 illustrations. Price 7s. 6d.

Medical News.

New Examination System of the Institute of Chemistry.

We are glad to learn that the important step has been decided upon by the Institute of Chemistry of holding examinations in Dublin at which chemists and others may present themselves for examination. These examinations will be held at the laboratories of the Royal University of Ireland, in Earlsfort Terrace. The next intermediate and final examination of the Institute, in Ireland, will be held in July, 1903.

Apothecaries' Hall, Ireland.

At the annual meeting of the General Council of the Apothecaries' Hall, Ireland, on August 1st, the following were elected to hold office for the year ending July 31st, 1903:—Governor, Geo. A. Stritch; Deputy-Governor, Arthur Atock, M.D. Directors: Hugh A. Auchinleck, F.R.C.S.I.; John Evans, L.R.C.S.I.; William V. Furlong, L.R.C.S.I.; Thomas D. Finucane, M.D.; Edward F. Hanrahan, M.B.; Michael F. McNamara, F.R.C.S.I.; Robert Montgomery, M.R.C.S.E.; Robert John Montgomery, M.B.; Richard G. O'Flaherty, M.B.; James Raverty, L.R.C.S.E.; James Shaw, L.R.C.S.I.; Joseph Ryan, L.R.C.S.Edin.; C. R. C. Tichborne, L.R.C.S I. Representative on the General Medical Council: C. R. C. Tichborne, L.R.C.S.I. Secretary: Robert Montgomery, M.R.C.S.E.

The Society for the Study of Disease in Children.

The following office-bearers have been elected for the Session 1902-1903.

Council:—Henry Ashby, M.D. (Manchester), Fletcher Beach, M.B., Herbert L. Carre-Smith, Edmund Cautley, M.D., Wayland C. Chaffey, M.D. (Brighton), Clinton T. Dent, M.C., Walter Edmunds, M.B., Leonard G. Guthrie, M.D., Robert Hutchison, M.D., Francis Jaffrey, T. Sinclair Kirk, B.Ch. (Belfast), David B. Lees, M.D., Charles J. Macalister, M.D. (Liverpool), Lewis Marshall, M.D. (Nottingham), Robert G. McKerron, M.D. (Aberdeen), Henry Betham Robinson, M.S., A. Ernest Sansom, M.D., George E. Shuttleworth, M.D. (Richmond, Surrey), Harold J. Stiles, C.M. (Edinburgh), George A. Sutherland, M.D., James Taylor, M.D., Alfred H. Tubby, M.S., Richard H. A. Whitelocke, C.M. (Oxford), William A. Wills, M.D.

Honorary Treasurer: R. Clement Lucas, B.S.

Honorary Secretaries: Sydney Stephenson, C.M., George Carpenter, M.D. (London), Theodore Fisher, M.D. (Provincial).

New Zealand and the University of London.

Mr. Seddon, Premier of New Zealand, has cabled home the announcement that out of four exhibitions and gold medals offered at the recent intermediate examination in Medicine of the University of London three have been secured by New Zealanders studying at Guy's Hospital. Mr. A. B. O'Brien, who obtained the exhibitions and medals for both anatomy and chemistry, is the captain of the Guy's Hospital Rugby Football Club, whose team are the holders of the Inter-Hospital Challenge Cup. Mr. R. W. Allen, the exhibitioner and medallist in Materia Medica, was this year the winner of the quarter-mile race in the Inter-Hospital Sports competition.

Royal College of Physicians of London.

At the ordinary quarterly *comitia* of the College the following were selected examiners in the subjects indicated for the ensuing collegiate year:—Chemistry and chemical physics—J. M. Thomson, F.R.S., H. Forster Morley, D.Sc., F.C.S., Harold B. Dixon, F.R.S., F. D. Chattaway, Ph.D., D.Sc., and H. M. Kellas, F.C.S.; Materia medica and pharmacy—F. Willcocks, M.D., E. C. Perry, M.D., W. E. Wynter, M.D., H. A. Caley, M.D., and F. W. Tunnicliffe, M.D.; Anatomy—B. C. A. Windle, M.D., and A. M. Paterson, M.D.; Physiology—R. A. Young, M.D., J. S. Edkins, M.B., and L. E. Hill, M.B.; Medical anatomy and the principles and practice of medicine—F. De H. Hall, M.D., Sir Isambard Owen, M.D., S. H. West, M.D., P. Kidd, M.D., J. Abercrombie, M.D., Nestor Tirard, M.D., Donald MacAlister, M.D., S. P. Phillips, M.D., William Pasteur, M.D., and J. R. Bradford, M.D.; Midwifery—A. L. Galabin, M.D., G. E. Herman, M.D., Amand Routh, M.D., W. R. Pollock, M.B., and E. Malins, M.D.; Public health—A. P. Luff, M.D., and W. H. Hamer, M.D.

Royal Army Medical Corps.

The following were mentioned in Lord Kitchener's recent official despatch:—Surg.-Gen. W. H. McNamara, M.D., C.B., C.M.G., Lieut.-Col. H. H. Johnston, M.D., Lieut.-Col. H. J. R. Moberley, Lieut.-Col. F. W. Trevor, M.B., Lieut.-Col. S. H. Carter, M.B., Lieut.-Col. G. E. Twiss, Lieut.-Col. O. Todd, M.B., Lieut. Col. G. T. Goggin, Lieut.-Col. R. Jennings, M.D., Lieut. Col. J. M. Irwin, M.B., Lieut.-Col. G. W. Brazier-Creagh, C.M.G., Maj. S. Hickson, M.B., Maj. C. Birt, Maj. M. P. C. Holt, Maj. M. W. Russell, Maj. C. H. Burtchaell, M.B., Maj. F. W. C. Jones, M.B., Maj. J. R. Mallins, M.B., Surg.-Maj. J. F. Bateson (Coldstream Guards), Maj. T. G. Lavie, Capt. W. W. O. Beveridge, M.B., Capt. A. F. Tyrell, Capt. J. C. Jameson, M.B., Capt. G. St. C. Thom, M.B., Capt. W. E. Hardy, Lieut. T. C. MacKenzie, Lieut. W. A. Woodside, Lieut. L. W. Harrison, M.B.

Royal Army Medical Corps (Militia).—Capt. A. F. Benson.

A New Pathological Scholarship.

It was mentioned at the meeting of the British Medical Association, recently held at Manchester, that Mr. J. Francis Mason, of Freeland Lodge, Woodstock, Oxfordshire, had, through Dr. Caverhill, of Edinburgh, offered a scholarship of £200 a year, with extension to two or three years if further study seems to promise good results, for the purpose of carrying on investigation into the physiology and pathology of the thymus gland, including, if necessary, collateral investigation on the other ductless glands. The founder of the scholarship has associated with himself Dr. Caverhill and Prof. Woodhead to act as a small committee for the purpose of selecting a suitable candidate. In filling up the scholarship preference will be given to those who have already made a study of the thymus or other ductless glands, or have given some evidence of their fitness to carry on this or similar work, and who will devote the whole of their time during the tenure of the scholarship to the special research mentioned. Every facility for carrying on this work in the Pathological Laboratories, Cambridge, will be placed at the disposal of the scholar.

London Hospital Medical College Prize List.

At the distribution of the prizes and certificates to the successful candidates for the Session 1901-1902, the following were awarded:—Price scholarships, in science, £120, J. Owen; in anatomy and physiology, £60, H. T. Thompson. Entrance science scholarships, £60, A. H. Pollard; £35, E. H. R. Harries. Buxton scholarships, arts, £30, B. R. Billings; £20, L. Edwards. Epsom scholarship, C. H. Scott. Clinical medicine, £20, scholarship, C. U. Aitchison; honorary certificates, E. H. Harrison and R. Spearman. Clinical surgery, £20, scholarship, F. S. Kidd; honorary cerrificates, J. H. Porter and W. W. Holtzmann. Clinical obstetrics, £20, scholarship, J. E. Frere; honorary certificate, H. R. Cran. Andrew Clark prize, £26, C. E. Ham; honorary certificate, L. Bousfield. Senior Letheby prize, £20, R. Milne; honorary certificates, E. J. Roberts and A. Salmon. Junior Letheby prize, £10, E. H. R. Harries; honorary certificates, S. J. A. Beale and A. H. Pollard. Sutton scholarship, £20, A. C. Le Rossignol; honorary certificate, H. W Kaye. Hutchinson prize, £35, A. W. S. Fisher. Anatomy and physiology, £25, scholarship, R. Milne; honorary certificate, R. A. Worthington. Anatomy and biology, £20, scholarship, J. Owen; honorary certificate, E. H. R. Harries. The usual minor prizes were also awarded.

Dublin Death-rate.

The deaths registered in the Dublin registration area for the week ending Saturday, August 2nd, 1902, represent an annual mortality of 22·7 in every 1,000 of the population. There were thirty deaths from diseases of the respiratory system, nine from diseases of the circulatory system, sixteen from diseases of the nervous system, and eighteen from measles. In the city proper the death-rate in the Clarence Street, North district, the South East Street district, and the Grand Canal Street district were 29·4, 25·3 and 26·9 per 1,000 respectively.

St. John Ambulance Association and the Coronation.

The St. John Ambulance Association, whose resources for the rapid treatment of accidents have become an absolute necessity in times of great public rejoicings, made unique arrangements for the handling of cases during the Coronation festivities. At every available nook and corner a small ambulance party was stationed whose resources, comprising ambulance, stretchers, bandages, splints, and supplies of "Oxo" (Liebig Company's Meat Extract) were as complete as the necessarily limited space would permit. The Association renders signal service at such times as these, when accidents are far more numerous than individual observers can conceive.

Medical, Sickness, and Accident Society.

The usual monthly meeting of the committee of the Medical, Sickness, Annuity, and Life Assurance Society was held at 429, Strand, London, W.C., on 25th ult. There were present Dr. de Haviland Hall in the chair, Dr. J. B. Ball, Mr. Fredk. Wallace, Dr. M. Greenwood, Mr. J. Brindley James, Dr. W. Knowsley Livesey, Mr. Wm. J. Stephens, Dr. Fredk. S. Palmer, Mr. H. P. Symonds, Dr. A. J. Rice Oxley, Dr. Walter Smith, and Dr. St. Clair B. Shadwell. The records of the Society during the first six months of this year show the business to have been exceptionally active. The advantages which membership in the Society confer are beginning to be better realised by the medical profession, and the number of new entrants is increasing. A considerable number of the present members are applying to have their assurances raised to the largest amount, £6 6s. per week, at present allowed by the rules, and there seems to be a general desire to increase the scope of the business in this direction. The sickness claims have been somewhat heavy, a considerable number having arisen from accidents caused by riding and rowing and not a few by cycling, and in some cases the injuries sustained have been severe. A substantial addition has, however, been made to the funds of the Society, which now amount to nearly £160,000. Prospectuses and all particulars on application to Mr. F. Addiscott, Secretary, Medical Sickness and Accident Society, 33, Chancery Lane, London, W.C.

Cancer Research.

Messrs. N. M. Rothschild and Sons have contributed, through Sir Alfred Cooper, F.R.C.S., a donation of £1,000 to the Cancer Research Fund now being raised under the direction of the Royal College of Physicians of London and the Royal College of Surgeons of England, of which fund the Prince of Wales is the president.

Cholera in the Far East.

Cholera is spreading from Manchuria to the Amur region. Last week there were 161 cases, and 101 deaths at Blagovestchensk.

Presentations to Dr. D. F. Rambaut, Richmond Asylum, Dublin.

On Friday last, at the Richmond Hospital, Dr. D. F. Rambaut, late clinical assistant, was presented with several handsome and valuable gifts from the different sections of the Richmond Asylum staffs on the occasion of his appointment as Medical Superintendent of the Salop and Montgomery Asylum at Shrewsbury. The presents included a handsome silver cup from the medical officers, tea service from the clerical and working staff, a beautifully illuminated address and silver cigar case from the attendant staff, some pieces of silver from the patients. In presenting a very handsome bowl, the gift of his medical colleagues, to Dr. Rambaut, Dr. Conolly Norman, resident medical superintendent, said that the staff were sorry to lose Dr. Rambaut, but all were glad of his promotion, and they heartily congratulated him. Several Irishmen had occupied positions at the head of English asylums, and of late years the Richmond had sent assistant medical officers trained in wards to asylums all over the sister island, north, south, east, and west, and to a great scientific hospital in London it had recently sent a former clinical assistant, who had also made his mark in a famous German laboratory. Dr. Rambaut is the first assistant medical officer who has been appointed directly to the superintendency of an English asylum. Dr. Rambaut replied in suitable terms. He was going to what he might call Dr. Norman's latest colony in England, for without Dr. Norman there would be no Shrewsbury.

Pass Lists.

Conjoint Examinations in Ireland.

The following candidates have passed the Final Examinations by the Royal College of Physicians and Royal College of Surgeons:—

Final Examination (passed in all subjects).—T. A Dillon, Miss H. A. Hall, Miss M. E. M. Logan, J. J. Moore, W. B. A. Moore, J. Murphy, J. Murray, M. A. A. O'Brien, J. O'Doherty, C. E. O'Keeffe, G. C. Robinson, F. C. York.

Completed the Examination.—H. M. Clarke, T. P. Cormack, Jas. Dwyer, R. W. Richards, G. J. Sexton, J. H. White.

Diploma in Public Health.—J. D. Wynne, M.B. (Honours), R. D. Booth, M.B., C. D. H. Rygate, M.R.C.S., Hugh Woods, M.D.

Notices to Correspondents, Short Letters, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

W. A. Smith (Oxoniensis).—If the cancer be inoperable you had better try what can be done by the use of the X-rays or the high-frequency current. Really wonderful results have been reported with both methods in cases that have been given up as hopeless. Hardly any case of cancer need be regarded as too far gone to admit of some chance of successful treatment. This kind of treatment, moreover, almost invariably affords relief from the pain and from the distressing symptoms that render life intolerable. If you wish we can communicate the name of a medical man who is an expert in both kinds of treatment.

CANCER RESEARCH.

An advertisement will be found in another column for a General Medical Superintendent in connection with the Cancer Research Fund. The amount of remuneration is not stated, but as the gentleman appointed will have to devote the whole of his time to the duties of this very important office, and for which very special knowledge and training are necessary, the salary attached should be a handsome one. We would suggest to the Executive Committee that if the proposed remuneration were stated, it might determine the class of candidates for the post.

Stockton (M.D.).—No system of clothing can be regarded as observing the elementary rules of common-sense unless it is pervious to the sweat-at any rate to the insensible sweat. On the other hand, it is obviously farcical to make collars, braces, and ties of permeable material. No really scientific handbook exists so far as we know, upon this important subject; nor do we for the moment recall any competent writer likely to do justice to it.

Dr. Denham.—Your letter will appear in the next number of our supplement.

Appointments.

Coaker, F. W. J., F.R.C.S.Eng., L.R.C.P.Lond., Medical Officer of Health for Bromsgrove Rural District, Worcestershire.

Edwards, Arthur Spencer, M.B., C.M.Edin., Medical Officer of Halling District of Strood Union and Public Vaccinator for the same District.

Ettles, W. J. M., M.D.Aberd., Medical Officer of Health for District No. 11 of the London County Council.

Fisher, Charles, M.B., B.S.Durham, M.R.C.S., L.R.C.P., Deputy Poor-law Medical Officer and Public Vaccinator to the Albury District of the Guildford Union.

Goodman, Godfrey, L.R.C.P., L.R.C.S.Irel., Diploma of State Medicine, Ireland, Medical Officer of Health for Glanford Brigg Rural District, Lincolnshire.

Howie, P., M.B., C.M.Aberd., Medical Officer to the Aberdeen Dispensary.

MacKenzie, W. S., L.R.C.P., L.R.C.S.Edin., Medical Officer of Health for Normanton Urban District, Yorkshire.

Martin, Ernest W., M.B., Ch.B., Assistant Physician to the Sanatorium, Crooksbury Ridges, near Farnham, Surrey.

Meggs, T. Hugh E., M.R.C.S., L.R.C.P., Public Vaccinator of the Slough District, Eton Union.

Monro-Home, G. H., M.D.Edin., Honorary Anæsthetist to the David Lewis Northern Hospital, Liverpool.

Nicholson, E., M.R.C.S., L.R.C.P.Lond., Medical Officer of Health to the Urban District Council of Fenny Stratford.

Sweeny, William James, M.B., B.Ch., B.A.O. Royal University, Ireland, Deputy Medical Officer for the Hornby District and Workhouse (Gloucestershire).

Valentine, W. A., M.D., B.Ch. Univ. Dubl., Surgeon and Agent of Sick Quarters, under the Admiralty, Appledore, Devon.

Vacancies.

Bury Infirmary.—Junior House Surgeon. Salary £90, with board, residence, and attendance. Applications to the Hon. Secretary, Dispensary, Knowsley Street, Bury, Lancashire.

Cancer Hospital, London.—Pathologist. Salary £250 per annum. Applications to the Secretary at the Hospital, Fulham Road, S.W.

Cornwall County Asylum, Bodmin.—Junior Assistant Medical Officer, unmarried. Salary £130, rising to £160, with board, furnished apartments, laundry, &c. Applications to the Medical Superintendent.

Dundee Sanatorium for Consumption.—Medical Superintendent. Salary £250 per annum. Applications to Thos. Thornton, Hon. Secretary, City Chambers, Dundee.

Gravesend Hospital.—House Surgeon. Salary £90 per annum, with board and residence. Applications to F. H. Stevens, Hon. Secretary, 146, Milton Road, Gravesend.

Halifax Union Poor-law Hospital.—Resident Medical Officer. Salary £160 per annum, with apartments, rations, and washing. Applications to Arthur T. Longbotham, Solicitor and Clerk to the Guardians, 4, Carlton Street, Halifax.

Jenner Institute of Preventive Medicine.—Assistant Bacteriologist. Salary £200, with furnished rooms. Applications before September 1st. (See Advt.)

Lanark County, Middle Ward District. — Resident Physician, Middle Ward Isolation Hospital. Salary £140 per annum, with board, &c. Applications to the Subscriber, J. B. Ferguson, Hamilton.

Liverpool Dispensaries.—Assistant Surgeon. Salary £100 per annum, with board and apartments. Applications immediately to Sam. B. Leicester, Secretary, 56, Vauxhall Road, Liverpool.

Liverpool Stanley Hospital.—Third House Surgeon. Salary £70 per annum, with board, residence, &c. Applications immediately to the Chairman of the Medical Board.

Nottingham General Dispensary.—Senior Resident Surgeon. Salary £200 per annum. Furnished apartments, attendance, light, and fuel are provided. Applications to Secretary, Martin Snell Preston, Journal Chambers, Nottingham.

Roxburgh District Asylum, Melrose, N.B.—Assistant Medical Officer. Salary £120 per annum, with board, rooms, and washing. Applications to the Medical Superintendent.

St. Andrew's Hospital for Mental Diseases, Northampton.—Junior Assistant Medical Officer. Salary £200 per annum, with board, furnished apartments, and washing. Applications to the Medical Superintendent.

Urlingford Dispensary District and Workhouse Hospital.—Temporary Medical Officer. Salary £3 3s. per week for the former, and £1 1s. per week for the latter office. Immediate application to M. P. Dowling, Clerk of Union. (See Advt.)

Births.

Clark.—On August 3rd, at 51 Parliament Hill, Hampstead Heath, N.W., to Dr. and Mrs. L. Pierce Clark—a daughter. U.S. papers, please copy.

Watson.—On August 7th, at 3 Mount Ephraim Road, Tunbridge Wells, the wife of George Trustram Watson, F.R.C.S., of a daughter.

Marriages.

Bond—Nunneley.—On August 7th, at Holy Trinity Church, Gray's Inn Road, by the Rev. F. Thorne, M.A., Rector, William Arthur Bond, M.A., M.D.Cambridge, Medical Officer of Health for Holborn, eldest son of W. Bond, Shrublands, Heigham, Norwich, to Constance Louisa, eldest daughter of E. M. Nunneley, Orlingbury, Northamptonshire.

Penton—Green.—On August 7th, at the Parish Church, Langham, Essex, Lt.-Col. Hugh Penton, D.S.O., (R.A.M.C., P.M.O. Egyptian Army, to Kathleen Rosa, youngest daughter of Lt.-Col. R. S. Green and Mrs. Green, of Stonylands, Dedham, Essex.

Thyne—Young.—On August 6th, at Metheringham, William Thyne, M.A., M.D., Barnet, to Kate Christian, youngest daughter of the late Thomas Young and Mrs. Young, of Roewath, Cumberland.

Death.

Henery.—On August 6th, at Bath, Edmund Thornton Henery, M.B.Cantab., of Plantation Providence, Berbice, in his 82nd year.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—St. George's, 2 p.m.—St. Mary's, 2.30 p.m.—Middlesex, 1.30 p.m.—Westminster, 2 p.m. Chelsea, 2 p.m.—Samaritan (Gynæcological, by Physicians), 2 p.m.—Soho Square, 2 p.m.—Royal Orthopædic, 2 p.m.—City Orthopædic, 4 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a.m.—Royal Free, 2 p.m.

TUESDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex 1.30 p.m.—Westminster, 2 p.m.—West London, 2.30 p.m.—University College, 2 p.m.—St. George's, 1 p.m.—St. Mary's, 1 p.m.—St. Mark's, 2.30 p.m.—Cancer, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Royal Ear, 3 p.m.—Samaritan 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—Soho Square, 2 p.m.

WEDNESDAYS. — St. Bartholomew's, 1.30 p.m. — University College, 2 p.m.—Royal Free, 2 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. Thomas's, 2 p.m.—London, 2 p.m.—King's College, 2 p.m.—St. George's, (Ophthalmic) 1 p.m.—St. Mary's, 2 p.m.—National Orthopædic, 10 a.m.—St. Peter's, 2 p.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Gt. Ormond St., 9.30 a.m.—Gt. Northern Central, 2.30 p.m.—Westminster, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Cancer, 2 p.m.—Throat (Golden Square) 9.30 p.m.

THURSDAYS.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—University College, 2 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—London, 2 p.m.—King's College, 2 p.m.—Middlesex, 1.30 p.m.—St. Mary's, 2.30 p.m.—Soho Square, 2 p.m.—North-West London, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central (Gynæcological), 2.30 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—St. Mark's, 2 p.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square) 9.30 a.m.

FRIDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—King's College, 2 p.m.—St. Mary's, 2 p.m.—Ophthalmic, 10 a.m.—Cancer, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—City Orthopædic, 2.30 p.m.—Soho Square, 2 p.m.

SATURDAYS.—Royal Free, 9 a.m.—London, 2 p.m.—Middlesex, 1.30 p.m.—St. Thomas's, 2 p.m.—University College, 9.15 a.m.—Charing Cross, 2 p.m.—St. George's, 1 p.m.—St. Mary's 10 p.m.—Throat (Golden Square), 9.30 a.m.

At the Royal Eye Hospital (2 p.m.), the Royal London Ophthalmic (10 a.m.), the Royal Westminster Ophthalmic (1.30 p.m.) and the Central London Ophthalmic Hospitals operations are performed daily.

The Medical Press and Circular.

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Original Communications.

AN OPERATION FOR GALL-STONES,

WITH THE AFTER-HISTORY OF A SERIES OF CASES OPERATED UPON. (a)

By RUTHERFORD MORISON, M.B., F. R.C.S.,
Surgeon, Royal Infirmary, Newcastle-on-Tyne.

IN a previous paper (b) I drew attention to the anatomy of the right hypochondrium in relation to gall-stone surgery, and suggested then that an incision in the transverse direction was better than the vertical one usually advocated.

In the wards of the late Dr. John Duncan, of Edinburgh, I saw for the first time an incision in the transverse direction; but the one he used was not strictly transverse, it was oblique, for it skirted the costal margin and it was short. My incision is transverse, is long, and is designed to expose the pouch I described by opening up the space between the liver above and the transverse colon below.

The weight of authority is still, so far as I can judge from the published papers, all in favour of operation through an anterior vertical incision in or about the linea semilunaris. The object of my paper is to emphasise more strongly than before my suggestion that this is not the best approach.

The operation I am about to describe allows of free access to the gall-bladder and its ducts with a minimum of disturbance of the abdominal viscera, free drainage is assured by it, and the chances of hernia of the scar are less, I believe, than when the incision is vertical.

The skin incision, when a difficult common duct operation has to be done, begins one inch below the tip of the twelfth rib and ends in front in the middle line, at the upper part of the middle one-third of a line drawn from the ensiform cartilage to the umbilicus. All the layers of the abdominal wall, including the rectus muscle, are divided, and the cut edges of the peritoneum are caught in clip forceps. A thick gauze pad or sponge is then packed into the abdomen under the lower flap of the wound over the colon and omentum, shutting off access to the general peritoneal cavity in this direction, and on the inner side and in front the stomach is covered and protected by a gauze pad.

The wound may be more thoroughly opened out by making the ilio-costal space convex to the right and pushing the hips and shoulders to the left.

Drainage is secured by indiarubber tubing, which, in the case of the gall-bladder, is fixed to it by a catgut suture, and a thick gauze strand brought through the wound posteriorly, the gauze being essential to secure the patency of the opening left. Drainage of the common duct is effected by leaving the opening in the duct unsutured with a large tube apposed to it.

Drainage of the hepatic and common ducts by a tube in the lumen does not appeal to me. A tube in the healthy rectum or nose or urethra is badly tolerated, and it seems improbable that the inflamed biliary ducts would be an exception to this rule, and possible that stricture might follow ulceration produced by prolonged tube pressure. If a soft drainage tube be used alone it soon becomes kinked from the tendency of the ext. oblique muscle to draw the opening in it upwards over the ribs.

In the paper previously mentioned I pointed out that biliary fistula not infrequently followed suture of the gall-bladder to the abdominal wall as a reason why this should never be done. The wound is closed either with four tiers of catgut or with two of catgut and one of silkworm gut. The first layer of catgut brings together at the sides the peritoneum, fascia, transversalis and internal oblique muscles, the second the external oblique muscle, the third secures the fat and skin subcutaneously to the external oblique, the fourth is subcuticular for the skin edges. If silkworm gut is used the first layer of deep far distance interrupted sutures attach the skin to the ext. oblique muscle, and bring the skin edges together roughly; the second intermediate interrupted sutures through the skin edges complete the apposition. In front the rectus muscle and aponeurosis receive the same care. To form a just estimate of the value of such an operation we require not only the information that the patient recovered from it, but to know the after-history for some considerable time.

To one who has not attempted such work as this it may seem easy enough, but in a colliery district patients are constantly "flitting," and we have found it to be no mean task. Our efforts to trace a case have too often been unavailing, but in all probability the accompanying table of after histories, for which I am indebted to Mr. G. Grey Turner, Surgical Registrar, Royal Infirmary, Newcastle, represents our average results, for every case we could find is recorded in it.

The total number of cases available is forty-three

All with the exception of the first two were operated upon by transverse incision.

The results generally confirm the surgical belief that gall-stone operations in the majority of cases are followed by permanent relief and by great improvement in the general health. They also bear out the expectation of every one acquainted with the results of post-mortem examination of gall-stone cases that in some instances stones will be left behind after the most careful and thorough operation, for it is impossible to remove stones from some of the hepatic ducts or stones embedded in certain parts of the liver.

(a) Read before the British Medical Association Meeting, Manchester, August, 1902.

British Medical Journal, November 3rd, 1894.

The first consideration was given to the question of recurrence of symptoms after operation, and the conclusion forced upon us was that a return of the symptoms meant gall-stone trouble.

Of the forty-three patients seven complained subsequent to operation. In one case (2) a stone was known to be left in at the time of operation. The patient was very ill, and the operation an early experience.

In two cases (8 and 5) recurrence of symptoms was probably due to new stone formation, for there was no relapse till four years and six years after operation.

Case 8 is of special interest because the gall-bladder and cystic duct with an impacted stone were excised.

In one case (7) it is not certain that stones were the cause of the illness as none were found at a second operation, though the symptoms were so typical that our belief was that the last stone had been passed just before it.

Three cases remain, and of these it is certain in one (Case 16), highly probable in two (Cases 27 and 39) that stones had been overlooked at the operation.

Case 16 is of great importance in this connection. The patient recovered from the first operation so completely, and improved so materially in condition, that no one suspected anything wrong. All this time, however, there was a large stone lodged in one of her ducts. The stone was of hazel nut size. It could not have been left in her gall-bladder, as that was fully slit up and explored; it could not have been in her common duct, as that was sufficiently dilated to allow of examination by my finger down as far as the duodenum and up as far as the hepatic ducts. That it had been left, and probably in a hepatic duct, was proved by the previous operation and by the facet upon it, yet the operation "cured" the patient for nine months.

It is not possible to say that operation will "cure" all gall-stone cases, but as a rule with few exceptions it may be stated that any stones left after operation will be of small size and unlikely to cause serious illness.

Careful inquiry was made as to the presence or absence of hernia of the scar.

A hernia of the scar was found in four of the forty-three cases. In Case 1, small vertical incision, gall-bladder sutured to skin, a hernia was present. In Case 5 the hernia resulted from insufficient suture. The patient was so ill that the wound was brought together roughly by a few through and through interrupted sutures. In the remaining two cases (24 and 39) defective suture was the obvious cause, as in both the hernia was outlined by the scars of an interrupted through and through suture of the posterior part of the wound, the portion in front, which had been more carefully apposed, being quite strong.

ON THE VALUE OF BLOOD EXAMINATIONS IN CASES OF ABDOMINAL DISEASE.

By C. NEPEAN LONGRIDGE, M.D., CH.B. VICT., M.R.C.S.ENG., L.R.C.P.LOND.

THE value of blood examination as a guide to prognosis and treatment is beginning to be widely recognised in this country; in abdominal, especially appendix cases, it is of special value, since experience shows that it is often impossible to diagnose correctly the exact condition and state of the inflamed parts. The leucocyte count gives valuable information as to the progress of the disease: in the majority of cases a more or less accurate knowledge is, of course, gained by ordinary examination, but there remains a minority in which the clinical signs are an insufficient guide. In these the leucocyte count is of especial value.

The method consists in counting the red and white cells together, in the erythrocyte pipette of the Thoma Zeiss hæmocytometer; a mixture of 1-200 is made, the diluting fluid used being Toisson's, which, while not affecting the red cells, stains the white a deep purple colour, so that the two can be counted together on the slide. The reds are counted by means of the squares, the whites by the "field method." Films are stained with Jenner's stain and 500 leucocytes counted in order to arrive at the differential counts. The leucocytes met with are the polymorphonuclear, lymphocytes, hyalines and eosinophiles. Haldane's hæmoglobinometer was used in cases where the hæmoglobin was estimated.

Leucocytosis is a sign of acute inflammation provided that

(*a*) Resistance of patient is capable of reaction,

(*b*) Intensity of infection is capable of exciting reaction.

The outcome of these factors means that a large leucocytosis will be provoked where the patient is in a high state of resistance and the infection severe, while a patient in a low state of resistance will under the same circumstances exhibit but a feeble leucocytosis. The balance of these factors may later on be of value in determining the prognosis of a case. The author is not prepared to state that any definite relation exists between the intensity of the infection and the amount of the leucocytosis. The pathological question of the source of the leucocytes is of great interest, whether, as Virchow and Ehrlich believe, their excessive number is due to stimulation of those organs which produce them; or whether, as von Limbech and Jakob hold, the chemiotactic substances generated at the site of the lesion suffice to draw them from their lurking places in the viscera and throw them into the peripheral circulation, is a subject beyond the scope of this paper. But it is a subject which I think is of importance, since, if we knew more of the place and conditions of the leucocyte's birth, it is possible that we might find ourselves able to influence those conditions in such a way as to excite a leucocytosis at will, an arrangement which might be a valuable therapeutical measure.

If, however, bearing in mind the two factors I have mentioned, we work upon the hypothesis that a leucocytosis is the expression of Nature's effort to counteract the toxæmia, a clear grasp of the general principle will be obtained. In describing the effect on the blood generally, it will be best to take each element in turn. I have not devoted any particular attention to the red cells, or the amount of hæmoglobin. Da Costa, however, who investigated this question, came to the conclusion that in the average acute case there was a loss of half a million red cells and 30 per cent. hæmoglobin. The thickness of the fibrin network is, I believe, generally increased, but I cannot speak on this point from my own observation. The number of blood platelets is also increased; although I never counted them, my impression is that I have seen more of them in cases with a large leucocytosis. The greatest alteration is found in the white cells. The normal number may be taken as 7,500, of which 60 to 75 per cent. are polym., 15 to 30 per cent. lymphocytes, 4 to 8 per cent. hyaline, 1 to 3 per cent. eosinophiles. The great increase of the total number is of course the most prominent feature of the blood picture. Almost equal in importance is the increase of the polymorphonuclear element, and thirdly, the diminution of the eosinophiles and lymphocytes. The hyalines about keep their place. The polymorphonuclears and hyalines are the most active phagocytes in the blood.

It was found, on taking the averages of the acute and of the more or less chronic cases in the table, that the leucocytosis of the twenty-two acute cases averaged 27 990, of which 84·9 per cent. were polymorphonucleous and 0·4 per cent. eosinophiles. Of the fourteen subacute and chronic cases—I take the pathological condition as the basis of classification—the average leucocytosis was 10·614, of which 63·1 per cent. were polymorphonucleous and 2·1 per cent. eosinophiles. The average count of five acute cases after operation, and just before leaving the hospital, was, whites, 10·500; poly., 60·1 per cent.; eosinophiles, 2·5, or a condition almost exactly similar to the chronic cases.

There are certain special factors which have to be taken into consideration. First, the influence of age. An analysis of the twenty-two acute cases gives the following results :—

Age.	No of Cases.	Whites.	Polym.	Eosinophiles.
Up to 20	6	26·100	85·8	0·3
20—30	8	24·320	83·9	0·35
30—40	5	39·610	86·8	0·32
Over 40	3	21·160	80·8	0·8

The number of cases is, of course, too small for these results to be of much value, but so far as it goes the table shows that leucocytosis is most free between the ages of 30-40, and diminishes after 40.

The physiological influence of age on leucocytosis is marked in the early months of life. At birth the number averages 18,000, sinks to 12,000 at the sixth month, and reaches the normal about the fifth year. The normal percentage of polymorphonuclears in infants is from 28 to 40 per cent. Marked leucocytosis also accompanies the later stages of pregnancy. An increase of 2,000 to 3,000 leucocytes may occur after a large meal or exercise in a healthy adult.

Reference must be made to cases where there is little or no leucocytosis, although the lesion is severe. First, there is a class of case in which the toxæmia is so intense that the reaction of the patient is overwhelmed. This class of case must, I think, be rare. Case 15 may, perhaps, be regarded as an example, as the lesion was very acute and extensive, and the patient a pale, ill-nourished boy, æt. 9. Secondly, a thick wall of inflammatory material surrounding a collection of pus may prevent the escape of the toxins which in some way cause the increase in the leucocytes. But in these cases valuable information may be gained from the differential count, a high percentage of polymorphonuclears indicating the possible severity of the lesion. Case 19 is a good example of this. The leucocytosis was only 14,000 on admission, but 83 per cent. were polymorphonuclear. The count sank to 8,600 in two days, but on operation a small thick-walled abscess was discovered. In Case 31, however, where the blood picture was much the same, no pus was discovered, but the parts were the seat of considerable recent inflammation.

Other cases which I might refer to are Cases 8 and 13. In the former, a spare man, æt. 51, the leucocytosis never rose above 11,500, and yet, although there was no pus, there was most extensive ulceration of the appendix. The clinical symptoms seemed to accord with the result of the blood examination.

Case 13 is interesting. The girl came in, in no very serious condition from the clinical point of view. The leucocytosis was 25,000 with 85 per cent. polymorphonuclear, next day it was 27,300, and on operation a long and gangrenous appendix was removed. The temperature fell, the wound healed, the bowels were open, no pain was felt. The clinical picture was in all respects highly satisfactory. Yet nearly a week after the operation the leucocytosis was 29,250. The evacuation of a deep collection of pus a few days later explained this apparent anomaly. Perhaps Case 25 may be noticed as an example of the influence of age.

There are a few interesting points in the second table. In Case 1 the somewhat high eosinophile count was probably caused by the presence of worms. In the first six cases, which were tuberculous in character, the number of lymphocytes is rather high. Cases 7 and 8 are high in eosinophiles, which is said to be the distinguishing feature of the blood in hydatid cases.

Case 9 is particularly interesting. The man was seized with sudden abdominal pain about half-past one. He came in in a very collapsed state, and remained so for three hours ; he then vomited slightly twice, and there was a streak of blood in the vomit. The pulse rose from 80 to 100. The abdomen was rigid, but not tender, and there was some diminution in the hepatic dulness. At 6.30 reaction began to set in. At 7.30 I counted his blood, but unfortunately omitted to make any films. There was, however, a leucocytosis of 22,950. The abdomen was opened at 9·15, and free fluid and a little gas found. There was no lymph, but the peritoneum was injected. A perforation of the stomach was found. The interest of this case is the fact that the leucocytosis occurred with such rapidity.

In conclusion, I must express my indebtedness to the medical and surgical staff of St. George's Hospital for their kindness in placing their clinical material at my disposal. I hope that the accompanying table will serve as an illustration of the value and the shortcomings of blood examinations in abdominal diseases. And, if I may be allowed to express an opinion, I think that we cannot regard a leucocytosis as an absolute and infallible indication of the presence of *pus*, but as an indication of toxæmia its value appears to me very great. Although I do not think it possible at present to fix any definite relationship between the amount of the leucocytosis and the intensity of the toxæmia, yet the broad fact remains that an increasing leucocytosis is, other things being equal, the most scientific means at our disposal for gauging the increasing virulence of an appendicular infection. On the other hand, a decreasing leucocytosis is evidence of decreasing virulence or walling-off of the toxic products.

I cannot do better than sum up the practical moral in the words of Da Costa :—"The surgeon who attempts to use the blood count in appendicitis as a definite pathognomonic sign, will soon run afoul of diagnostic disasters, but he who regards it as only a symptom invariably to be correlated with other equally, if not more, important clinical manifestations, cannot fail to find this method of inquiry of signal value in routine clinical surgery."

Sudden and Accidental Deaths.

An inquest was held last week in respect of the death of Dr. James Rodger, of Caledonian Road, N. The deceased had for some years suffered from symptoms of cardiac angina, and after an effort he suddenly expired. A verdict of death from syncope was returned. More tragic was the death of Dr. H. W. Pepper, of Birmingham, who was knocked overboard by the boom while yachting on the river Bure, and, having probably been rendered unconscious, was drowned before assistance could be rendered. His companion, a Mr. McDougal, was saved.

THE DIAGNOSIS, PREVENTION, AND TREATMENT OF PUERPERAL INFECTION. (a)

By FREDERICK HOLME WIGGIN, M.D.,

Visiting Gynæcologist City Hospital, and Visiting Surgeon at Elizabeth's Hospital, New York; Member American Medical Association; the New York Medical Association; Fellow New York Academy of Medicine, &c.

Thomas Kirkland, Ashby, England, in 1774 called attention to the fact that the so-called puerperal fever was a contagious disease. This view was later supported by other independent observers, notably in 1843 by our own Oliver Wendell Holmes, by Sir James Young Simpson in 1846, by Semmelweiss in 1847, and by Trousseau in 1858. But it needed the teaching and practical results obtained by Lister, based on the previous work of Pasteur and by the demonstration of the latter in 1880, that streptococci are often found in the lochial discharges of puerperal women suffering from fever and other constitutional disturbances, before obstetric surgeons finally recognised it as a fact that these pathological manifestations were due to the same micro-organisms, whose entrance into wounds in other parts of the body were followed by similar constitutional disturbances, and that when the wounded maternal parts were kept free from these organisms or their products: that the puerperal woman during her convalescence was free from constitutional disturbances of a febrile nature. The practical result of the acceptance of these views and the change in technique in obstetric practice which followed in lying-in hospitals resulted, as is well known, in the practical abolition of epidemics of what was formerly known as puerperal fever, with its high mortality rate; till at the present time, when infection of the mother's wounds does occasionally occur, the constitutional symptoms are mild in character, the disease is readily controlled, and the mortality rate a fraction of 1 per cent. Unfortunately these results have not been achieved by all physicians in private practice, and it seems strange that we are obliged to admit that puerperal wound infection in the ordinary daily practice of physicians, is probably almost of as frequent occurrence and is followed by as severe constitutional symptoms and with as high a rate of mortality as it was fifty years ago. Many physicians have been slow to grasp the importance of the principles underlying modern surgical teaching, or while knowing these principles they have yet failed to apply them to obstetric work and consequently have not profited by them. They are still too often seeking consolation and explanation of the fever and other constitutional symptoms complicating the puerperal convalescence, in the possibility that the disturbance arises from the beginning of lactation, or from the specific poisons causing malarial or typhoid fever, instead of attributing those symptoms to their true cause, in almost every instance, wound infection.

Before considering the diagnosis of abnormal puerperal conditions, it is well to recall the fact that when normal conditions prevail during the puerperium, the pulse rate falls soon after delivery and is slower for a time than usual; that the respirations are normal and that there is little or no rise of body temperature; that increase of pulse rate and of body temperature due to emotional causes rapidly subsides, and that similar variations due to an overloaded colon disappear as soon as the bowels move. We should be on our guard, therefore, to quickly recognise that infection of some portion of the wounded maternal parts has almost certainly occurred whenever we find that a puerperal woman during the early days of her convalescence has a pulse-rate of 90 beats a minute or higher, accompanied by a temperature of 100·5° F. or more, especially if these symptoms continue for more than twelve hours. A careful general examination of the patient should at once be made to exclude inflammatory conditions of the breasts and other sources of error; this should be followed by a local examination, and it will probably be found that there are some ulcerating wounds on either perineum, vulva, vaginal walls or cervix, which are covered with a dirty yellowish secretion. If the patient does well for several days and then complains of headache and general discomfort, having at the same time a rapidly rising pulse-rate, a chill, a marked elevation of body temperature, and pains in the lower abdomen, and if on local examination an enlarged doughy and tender uterus be found, with its cervix patulous and the lochial discharge purulent in character, with less colour than usual, it is reasonably certain that the trouble is due to the most common variety of puerperal infection, endometritis caused by the absorption of the products of decomposition, and that on examining the interior of the uterus a retained portion of the membrane will be found; or there will be discovered a roughening of its inner surface at the placental site caused by adherent portions of the placenta. When the trouble is confined to this region, the course of the disease is limited, and in a few days the constitutional symptoms will subside and the disorder becomes chronic; or the entire endometrium may become involved in the process, in which case the condition is more serious, the constitutional symptoms more marked, the lochial discharge having more odour and less colour than in the milder form of the disease. As a rule the trouble does not extend beyond the endometrium, but, when it does, the evidences of its extension are repeated chills and a daily variation of several degrees of temperature, the usual symptoms of pus formation, the rise of temperature continuing until the abscess is opened and evacuated. The peritonitis following this form of the disease is usually circumscribed. A bacteriological examination of the uterine secretions will probably demonstrate the presence of staphylococci, and establish the fact that the disorder is due to their special action. When the cause of the septic trouble is due to the direct invasion of the tissues by the streptococci the constitutional symptoms are much more severe in character; the very rapid and weak pulse especially attracts attention, while on the other hand the local symptoms are less marked in character: the uterus on examination is found less sensitive to pressure, of proper size, the cervix is closed, and the lochial discharge diminished in quantity or absent, or free from both odour and colour. Symptoms of general suppurative peritonitis may be the first local sign of the infection to attract attention. The symptoms of this serious complication usually manifest themselves between the second and seventh days of the puerperium, and are characterised, in addition to the ones already mentioned, by intense pain, which, at first, is limited to the lower abdomen, but which gradually extends upward and is accompanied by tympanites. Septicæmia, the most fatal form of wound infection, results from the direct invasion of the tissues by virulent streptococci and the absorption at the same time by the tissues of the toxines of decomposition produced by the presence of staphylococci. Its characteristic sign is the great amount of bodily prostration which accompanies the other constitutional symptoms of wound infection. Pyæmia manifests itself by the occurrence, ordinarily in the second week of the convalescence, of recurring chills accompanied by a widely fluctuating temperature and the formation of abscesses in various parts of the body. Broncho-pneumonia is a more or less frequent consequence. Phlegmasia alba dolens manifests itself in the second week of the puerperium by pain along the course of one or other of the femoral veins, usually the left, accompanied by swelling of the limb from above downward. When the infection arises from the invasion of the wounded tissues by gonococci, it may usually be determined by the coincident occurrence of ophthalmia neonatorum. The presence of the Klebs-Loeffler bacilli in the wound may be determined by the appearance of the characteristic membrane on the wounded surfaces combined with the usual constitutional symptoms, confirmed by a bacteriological examination of the lochial discharge.

The patient's wounds may also be infected by the bacilli coli communis, the pneumococcus, and others. It is important, as soon as we are aware of the fact that the patient's wounds have become contaminated, that a bacteriological examination, when practical, be made of the lochial discharge, as the information derived therefrom will aid us in deciding the form of treatment to be carried out. Malarial infection can be excluded, as a rule, by remembering the fact that in septic poisoning the pulse-rate is higher than the temperature, and by the absence in the blood of Lavaran's bodies, whereas in malarial infection they are present and the temperature is higher than the pulse-rate.

(a) Read before the New York County Medical Association, and inserted by request.

Typhoid fever may be excluded by the absence of the characteristic eruption and the negative result of Widal's reaction.

The causes of puerperal wound infection having been proved to be the result of the introduction into the parturient canal of septic material either before, at the time of, or subsequent to delivery, the great responsibility therefore devolves upon the obstetric surgeon of preventing its occurrence, which can ordinarily be done by his bearing in mind a few easily-comprehended principles, by the exercise of watchfulness, and by attention to a few simple details, which are easily carried out even in the homes of the poor. It should be constantly borne in mind by the physician that these germs may be brought in contact with the parts by the act of copulation, by the hands of the patient, nurse, or physician, especially if wounds exist in the canal, or by means of unsterilised instruments, syringes used for both enemas and vaginal douches, dirty bedding, linen and towels, neglect to properly care for the patient's body, and to empty the intestinal canal.

The nurse selected to attend an obstetric case should be chosen with as much care, if practicable, as one would be for a patient on whom an abdominal operation is to be performed, or, in other words, she should understand the prime importance of cleanliness, and be sufficiently trained to carry out the necessary details, as well as to be able to care for the infant; it is as well when possible to have the nurse in attendance on the patient a short time before the expected delivery, and the necessary instructions should be given to her to empty the patient's bowels and to get her skin in good order by means of hot baths, especially that of the external genitals and the anal region, before the expected delivery. At the first indication of labour the rectum should be washed out by an enema of soap suds, and as soon as this has been accomplished the mother should be given a final hot bath, after which the genitals and the anus should be washed with a solution of carbolic acid and the parts protected by a sterilised napkin—or what is better, an obstetric pad—until the end of the second stage of labour has been nearly reached; after this preparation each act of urination or defæcation should be followed by again thoroughly cleansing the external genitals and the anal region, by washing them thoroughly with an antiseptic solution.

The physician on his arrival should be careful to disinfect his hands before making a vaginal examination, and this he can readily do by scrubbing his hands and arms in hot running water, preferably using tincture of green soap, and scrubbing them for ten minutes with a fibre brush. The hands should next be immersed in alcohol, the nails being cleansed with a piece of sterilised gauze wet in the alcohol; they should next be immersed in an alcoholic solution of bichloride of mercury of the strength of 1-500, which solution should be removed from the hands by sterilised water before the lubricant is applied to them, which lubricant should be contained in a collapsible tube, or the physician after cleansing his hands may put on rubber gloves that have been boiled for at least half an hour and have then been soaked in a 1 per cent. solution of lysol. As few vaginal examinations should be made as possible during labour, the required information, after the position of the child has been determined, can be obtained by external examination, with the exception of that relating to the duration of labour. As the second stage of labour draws to a termination the obstetric pad should be removed, the patient placed on a sterilised sheet, and her thighs and abdomen protected with sterilised towels, or with those which at least have been recently washed, and the obstetrician should wear a gown or an improvised one made from a sterilised sheet.

It is, of course, of the utmost importance that the membrane and placenta should be removed intact; the physician should make certain of this by carefully inspecting them after they have come away, and if he finds that portions of either have been retained he should, after thoroughly sterilising the external genitals, the vagina, and his hand and arm, determine this by an intra-uterine examination, removing them if found; this procedure should be followed by an irrigation of the uterine cavity with sterile salt solution followed by hydrozone. This complication will, however, seldom occur if the physician abstains from administering ergot to his patient until after the delivery of the placenta.

As soon as the labour is over and the patient has had time for a little rest, the physician should make a careful inspection of the perineum, vulva, vaginal and cervical tissues, and if any lacerations of the parts are found they should be at once repaired and the parts washed with sterile salt solution and hydrogen peroxide, and protected with sterilised pads. No intra-uterine douche should be given unless it has been necessary to introduce the hand into the uterine cavity. In the after treatment of the patient under normal conditions, vaginal douches should be omitted, the nurse being directed to keep the external genitals and the anal region in good order by carefully washing and disinfecting them after each act of urination and defæcation.

If, on visiting the patient the physician finds an accelerated pulse and elevated temperature, he should carefully examine her, and afterwards make a local examination, first disinfecting his hands and instruments. If he finds an ulceration of the perineum, vagina or cervical tissues, he should thoroughly wash out the vagina with salt solution and follow this with hydrozone or other strong solution of peroxide of hydrogen. If, in the judgment of the physician it is necessary to follow this treatment with other irrigations of the vagina, he should administer them himself and not leave them for the nurse. If the septic trouble is more serious in character, and is due to the retention in the uterine cavity of decomposed septic material, the patient should be put on a table and placed under the influence of an anæsthetic, and after the external genitals and vagina have been carefully disinfected the uterine cavity should be explored with the finger, which has also been carefully disinfected—or if the operator is trained and skilful with the curette—and the offending material removed. The cavity of the organ should then be thoroughly washed out with saline solution followed by hydrogen dioxide and an application of Monsell's solution if the cavity has been curetted. If the operation has been well performed the patient's constitutional symptoms will probably disappear and no further uterine intervention will be necessary. It will, however, probably be best for the physician to give the patient a vaginal douche of saline solution, followed by hydrogen dioxide once or twice a day for several days. If, however, the constitutional symptoms persist and the condition becomes chronic, it may be necessary to again explore the cavity of the uterus. If the trouble extends beyond the endometrium and an abscess forms, it should be evacuated by means of a vaginal incision, or if there be a bilateral pyosalpinx to deal with, it may be necessary to open the abdomen and remove the diseased tubes and uterus. If it be determined after careful examination that the septic condition of the patient is due to the direct invasion of the tissues by the virulent streptococcus, the physician should, in the writer's opinion, after thoroughly cleansing the external genitals and the vagina of the patient, dilate the cervix and explore the uterine cavity with the finger or with the curette, and then after thoroughly irrigating the cavity with saline solution and hydrozone, should make an application of Monsell's solution. If the constitutional symptoms of the patient as the result of treatment do not show improvement in a few hours, an intravenous infusion of a considerable quantity of saline solution should be given, and the advisability of opening the abdomen and removing the uterus considered;

bearing in mind, as has been pointed out by Vineberg, that the uterus is the focus of the disease and that the patient's system will eliminate a reasonable amount of infective material by the skin, kidneys, and intestines; therefore, if the further production of the poison can be stopped, there is a reasonable chance of that already in the patient's system being eliminated and recovery following.

Although a few observers have claimed benefit to have accrued to their patients suffering from this form of infection from the use of Mamorek's anti-streptococcus serum, the burden of testimony is against its having been of any avail in these cases; if used, from 10 to 20 cubic centimetres should be injected into the patient's body every twelve hours till she shows signs of improvement, or a reasonable quantity has been used. When, from the severe prostration and other constitutional symptoms which accompany it, there is reason to believe that the patient is suffering from septicæmia, she should at once be stimulated and given the benefit of a large intravenous saline infusion slowly administered, the temperature of the solution in the reservoir being 120° F., and if she rallies in response to this treatment the vagina and uterine cavity should be cleaned out by thoroughly washing them with saline solution followed by hydrogen dioxide, and the cavities loosely packed with sterilised gauze soaked in ozonised glycerine, which will tend still further to disinfect the parts; the gauze should be removed in from eight to twelve hours, and the application repeated. If under this treatment there are signs of improvement, it may be continued at lengthening intervals, or the propriety of more radical measures be considered. If there is no improvement in the patient's condition, further operative treatment will be of no avail. If pyæmic conditions are recognised before the onset of pneumonia, there may be some hope under favourable conditions of saving the patient by cleansing and disinfecting the external genitals and vagina, followed by the prompt performance of an abdominal hysterectomy. When thrombosis of the femoral vein occurs its course should be painted with iodine, the limb wrapped in cotton, bandaged, and kept in an elevated position, which should be maintained for two weeks after all swelling has disappeared. Abscesses should be promptly opened.

In the treatment of the various forms of puerperal wound infection there is little to be hoped for in the use of drugs except as temporary aids, the physician's reliance being placed rather on the administration of proper nourishment, increasing the activity of the skin, the kidneys, and the bowels by the internal administration of large quantities of saline solution by means of enemas, injections under the skin or into the patient's veins, according to the urgency of the symptoms, and appropriate carefully considered local treatment, which must be decided for each case as it arises.

Curettage and other operative measures should not be universally condemned because when performed by inexperienced and untrained men, or under unfavourable conditions, they have more often been followed by harmful rather than good results. The importance of an early recognition of the fact that the patient's wounds have become infected cannot be overestimated, for on this the physician must rely to institute proper local treatment at an early stage of the trouble, and before the patient's system is overwhelmed by the poison, for on this must largely depend whether or not the prognosis of the graver forms of the disorder is to be more favourable in the future than in the past.

Who Shall Decide?

The Ballachulish (N.B.) Quarries Co. recently decided to dismiss their medical officer, a step which was resented by the workpeople, who have made strong representations to the Company in opposition thereto. Failing satisfaction they have requested the medical officer to continue his ministrations, and they threaten to strike if any obstacle be placed in his way. This incident is a refreshing contrast to the conflicts which have been waging of late between working-men and their medical officers in respect of increased emoluments.

SOME SUGGESTED STANDARDS FOR PHARMACOPŒIAL PREPARATIONS. (a)

By J. C. McWALTER, M.A., D.P.H., F.F.P.&S.Glasg.

John Stuart Mill, in a passage which has greatly influenced the trend of thought among his followers, denies that medicine can be regarded as a science. It lacks, he argues, that correlation between cause and effect, that invariable sequence between antecedent and consequent, which elevates a branch of learning to the dignity of a science. In Mill's time medicine meant therapeutics, and it is to this department that the reproach may still be levelled with much justice.

All things which can be reduced to units of mass length and time may be the subjects of a science; and the object of standardisation of drugs is obviously to reduce them to definite active factors. Drugs vary in their action with different individuals, and even with the same individual at different times; but until we know that we are dealing with the same amount of active principle it is impossible to allege that the variation is due to some alteration in the drug, and not to some idiosyncrasy in the individual.

Climate, season, soil, and sun modify the amount of active constituents in a given drug, and the element of uncertainty of action caused thereby may be reduced by the expedient of standardisation. Notwithstanding its utility it is but a temporary expediency, and when we arrive at more certainty as to the source of action of each drug standardisation will naturally cease; for as soon as we know, and can isolate commercially, some active principle, whether resinoid, glucosidic, alkaloidal, oily, acid, or ferment, its galenical preparations must gradually pass away and be displaced by the chemically separated active principles. The articles in the Pharmacopœia already standardised, as nux vomica, cinchona, belladonna, ipecac, &c., have given great satisfaction to therapeutists. The effects of the drugs have been studied with an accuracy which bids fair to redeem pharmacology from reproach, and to restore scientific therapy to its proper position. But much remains to be done in the direction of standardisation of a humbler type, that, namely, wherein a given weight of extract is directed to be obtained from any sufficient quantity of a drug, of which the liquid extract of poreira is the type in the present Pharmacopœia. Hitherto the pharmacist has been directed to take a given weight of drug and produce from it an indefinite weight of extract, of a varying consistency known as "pilular," whereas now we have advanced a step by requiring him to produce a definite weight of extract from as much of the drug as may be needful. Thus to some approximate extent we guard ourselves against variations in the strength of the green root, fruit, leaf, seed, &c., which may be due to season, soil, temperature, &c. Of the more important drugs capable of definite standardisation some may be mentioned. The alkaloidal strength of coca extracts varies notoriously, and most of all the so-called soluble varieties used for coca wine making; commercial extracts vary in strength of total alkaloid from ·182 to ·613 per cent. The bulk of fairly well made ones reach about ·4 per cent., and this would be a reasonable standard. One-half per cent. has been suggested, but there is a danger in encouraging too potent an article as a drug for popular consumption, and a limit of about ·35 to ·40 per cent. would be fair. Jaborandi will never obtain that honourable place in therapeutics which pilocarpine has been granted unless a system of standardisation be adopted. The proportion of the latter is usually estimated at 1 in 200, and hence ·5 per cent. would seem a proper percentage. On the other hand, if this limit were adopted, as Merck has pointed out, makers would stuff their extracts with a sufficiency of that alkaloid to pass the test; whilst jaborine and pilocarpidine might be wanting. A total alkaloid yield of one-half per cent. would then probably be preferable.

Belladonna.—The fluid extract and tincture are now so satisfactorily standardised that many practitioners have been rather alarmed at their activity. It remains to standardise the green extract, and 1 per cent. of alkaloid separated and weighed is generally advised.

(a) Paper read before the British Medical Association, Manchester, July 30th, 1902.

Ammoniacum.—Only that with an essential oil and of strong odour should be used in pharmacy. To ensure this a limit of insolubility in 90 per cent. alcohol should be laid down, perhaps 20 per cent.

Anisi Fructus.—Much of the seeds and fruits of commerce is contaminated with dirt, and to restrain this within reasonable limits an ash limit ought to be stated, certainly not more than 10 per cent.

Araroba is a drug decidedly useful, which has got into disrepute through samples being so largely adulterated: an exact ash limit should be mentioned—probably 20 per cent.

Calumba.—This also requires an ash limit, say 7 per cent.

Cantharis.—There is no living medical man but has been at some disappointment in the action of a fly blister or other preparation of cantharides. This would be largely overcome if preparations were standardised as to cantharidin, according to the method of Greenish and Wilson. Any varieties of blistering beetle could then be used if they yielded, say, ·5 per cent. of cantharidine (1 in 200).

Cascarilla was at one time somewhat prized as an aromatic adjunct of more potent remedies for skin and stomach affections; that it should be condemned as untrustworthy is not wonderful, seeing that the proportion of extractive varies from 5 to 14 per cent., and the ash from 8 to 24 per cent.; probably, if a limit were fixed of 8 per cent. of extractive and 10 of ash, pharmacologists might again become reconciled to its use.

Digitalis.—There is scarcely a drug of more vital importance than digitalis, and every effort should be made to have it of uniform strength. Hence the official directions as to the growth of collections of digitalis leaves are justifiable, although digitoxin is possibly not the active principle, and probably not the sole active principle; but its proportion is a good guide for standardisation. It has been shown to vary from ·533 in June to ·381 in August, diminishing till scarcely a trace is left. Hence, if a minimum of ·5 per cent. of crude digitoxin were officially required, with not more than 8 per cent. of ash, an approach to uniformity would be acquired.

Cascara Sagrada.—Practitioners have found this drug to vary very much in effects, which is no wonder when commercial specimens of the fluid extract yield from 15 to 30 per cent. of extractive. As it tends to deposit the limit of solid extract, yield by it should not be too rigidly fixed, but 24 per cent. would be a satisfactory amount, which ought to be insisted on.

Extractum Ergotæ.—Some indication of potency is urgently required. Until a satisfactory assay process may be devised, fluid extracts prepared according to the official modes should be made to yield 20 per cent. of extractive when dried to 212° F.

Extractum Taraxaci Liquidum.—This preparation, as found in the pharmacies, is notoriously variable. A gravimetrive method ought to be adopted showing 25 per cent. of residue per fluid ounce.

Ferri Sulphas Exsiccat.—The B.P. standard for this, 92·5 per cent., is somewhat too high. Commercial standards average about 90 per cent., and the lower figure is preferable, as when too high a per centage is sought for the salt is rendered insoluble and partly inert.

Fœniculi Fructus.—Not more than 9 per cent. of ash should be present.

Galbanum.—Not more than 50 per cent. ought to be insoluble in 90 per cent. alcohol, and the ash yield should not exceed 10 per cent.

Guaiaci Resina.—To detect colophony or other adulterations acid numbers should be given. The crude lump 90 to 95, natural tears 70 to 75, &c, and an ash limit of not over 1 per cent. are fair figures.

Infusa.—The infusion is generally looked on as a method of preparing medicines only fit for a housewife. There has been no appreciable improvement in their method of making for the last century, except in a couple of instances, as cinchona and roses. They are notoriously variable in their strength, and untrustworthy in their action, whilst the different colours which they show when prepared by different chemists are a constant source of trial to nervous patients and annoyance to harassed physicians. If figures were laid down for the amount of extraction some approach to uniformity would be obtained. Gadd, a maker, gives the following as fair averages:—

	Per cent. extraction.
Infusion of orange	1·43
Infusion of calumba	0·54
Infusion of cascarilla	0·27
Infusion of cloves	0·59
Infusion of buchu	1·25
Infusion of digitalis	0·28
Infusion of serpentary	1·38
Comp. infusion of gentian ...	1·02
Infusion of senega	0·88
Acid infusion of roses	0·73

Pulvis Glycyrrhizæ Compositus.—This article has now become so popular a remedy, and is turned out in such large quantities and under such competitive conditions, that a test is required for an article strictly conforming to the B.P. directions. The moisture should be 4 to 6 per cent. ash, not above 5, and soluble ash not exceeding 3 per cent. Not less than 4 per cent. should be yielded to 70 per cent. alcohol

Liquores Concentrali.—The concentrated liquors of the present Pharmacopœia are a great advance of the concentrated infusions of the shops. They would be still more satisfactory if a definite strength of extractive were directed for each, as those now sent out vary with the strength of every maker's press, as well as the character of the crude drug. Thus calumba should give 4 per cent. of extractive, senega and rhubarb 10, gentian the same. Other concentrated liquors might well be added, as cinchonin, cinchona, digitalis, serpentary, uvæ ursa, &c.

Oleum Caryophylli.—The specific gravity test is scarcely sufficient as a criterion of the purity of this oil. There ought to be added a requirement that it shall yield not less than 80 per cent. to 10 per cent. potash solution.

Tincturæ.—As regards tinctures much is to be said for and against the recognition of a definite specificity, gravity or proportion of total extractives. But where a comparatively definite substance can be recognised its proportion ought to be insisted on as of aloes, which should show 7 per cent. and asafœtida 10 per cent. Colchicum should be standardised to ·075 per cent. of colchicine, and conium to ·1 of total alkaloids.

Cubebs should yield 2 per cent. of oleo, resin, and gelsemium ·025 per cent. of gelsemine, hyoscyamus ought to be of a uniform strength of ·01 of total alkaloid per cent., jaborandi of ·05 pilocarpine.

Lobelia has sunk in the estimation of physicians on account of its untrustworthiness. It would recover its reputation if it were standardised to ·075 of lobeline.

Myrrh should yield 6 per cent. of resins, and squills 10 per cent. of total solids.

Stramonium ought to give not less than ·05 of total alkaloid and strophanthus ·3 per cent. of strophanthine.

Tolu should be standardised to 2 per cent. of benzoic and cinnamic acids.

Special Article.

PRIMITIVE, PRE-HISTORIC TREPHINING.

The exceptional interest attached to the operation of trephining is partly due to the fact that this method of surgical procedure deals especially with the environments of the organ of thought—the healthy functions of which furnish the elevating factor that assures to man the distinctive position of "Lord of the Creation"; partly, to the thrilling feeling of danger which was connected with its performance before the introduction of antisepsis; and partly to the hopeless uncertainty regarding its applicability in cases other than depressed fracture, which continuously hovered over the mind of the surgeon before the brilliant dawn of "cerebral localisation." The possibilities of latter-day trephining hardly require critical discussion in the opening years of the twentieth century; but the archæology of the procedure has, from time to time, of recent years thrown some twinkling rays into the dark recesses of pre-historic surgery. The interest attached to the consequent revelations has been further emphasised by the recent discoveries which have demonstrated the preservation of those old-time methods of primitive man in search of relief from physical suffering, in the remote corners of the world whose inhabitants have hitherto escaped the enlightenment, or the contamination, of the habits and results of modern civilised life. This attractive subject of pre-historic trephining has attracted a good deal of attention from archæologists and surgeons, more especially since the lead in that direction was taken by the illustrious bearer of the name of Paul Broca—the brilliant and many-sided professor of medicine, the thoughtful and conscientious French senator, and the keenly-scrutinising archæologist. Prominent and permanent landmarks have since been raised along the same scientific route by Prunèires, Paris, Chouquet, Gassie, Wankel, Virchow, and other distinguished investigators. And, in the recently issued number of the *Journal of the Anthropological Institute of Great Britain and Ireland* (July to December, 1901), we find a most interesting communication on this subject which hails from the far-away "South Seas," to the trephining practices of whose island inhabitants M. Broca himself called attention a good many years ago. The author of this interesting and instructive contribution to our knowledge of the subject of primitive methods of trephining is the Rev. J. A. Crump. He has well and profitably utilised the spare hours which his clerical duties have left on his hands by collecting important material for the enlightenment of his scientific brethren and friends in the old countries. We congratulate him, as well as the members of the Anthropological Institute—and ourselves—on the fact that his paper and specimens were submitted by Mr. (now Sir) Victor Horsley, who has devoted so large a share of the best energies of his professional life to the advancement of our knowledge of cerebral localisation, and of the applicability of the surgical procedures connected therewith. In his original communication on the subject, M. Broca told his readers that "until quite recently trephining of a primitive kind was in use among some of the South Sea Islanders for the treatment of epilepsy, insanity and even headache, and the operation was done by scraping with a piece of flint or broken glass, when the latter was to be had from Europeans. In much the same way, and with similar instruments, the operation was done in the neolithic or polished stone period, the age following the so-called quaternary, and preceding the bronze epoch. This period corresponds with the burial in dolmens, the use of agriculture and the employment of domestic animals, the making of hatchets of polished flint, though rough chipped instruments were still in use." The scrutiny of the skulls which were examined by Broca and Prunèires in this connection displayed to them that there had been a practice of post-mortem, as well as of ante-mortem, trephining among those primitive islanders. It also appeared that the ante-mortem—surgical—operation had, in nearly all their specimens been performed in the first few years of life. And—that the posthumous operation had been performed only on those who had undergone and survived the other. In many of the skulls which bore unmistakable evidence of subsequent development it was found that a number of pieces of bone had been artificially chipped off from the margins of the orifice. Some of these detached pieces were actually found, which had been shaped as amulets, or perforated for purpose of suspension. M. Broca's hypothesis of the existence of these facts seems to have been borne out by all subsequent discoveries, and they are largely corroborated by the paper now before us. His explanation was found by referring to the primitive notion that very pronounced head symptoms—such as insanity, epilepsy, melancholy, and even violent headache—were due to demoniacal possession; that the artificial cranial orifice was made to promote the exit o the evil spirit; and—that for the remainder of life the individual would be regarded as a sacred personality, with the superadded distinction that his relics after death would be greedily sought as "charms" and miraculous agents for the warding off or the expulsion of evil spirits. The evidence of such beliefs was further complicated by the fact that in all the cases of this post-mortem trephining noted by those distinguished observers, a certain proportion—usually about one-fourth—of the circumference of the original opening had been left undisturbed; and that the vacancies left by the removal of the amulet material had been, in each specimen, approximately filled by similar pieces from some other skull. In discussing this very curious point M. Broca expands his hypothesis by offering the fact as an indication—the earliest that he knew of—of a belief in an existence after death. It proves, to his mind, that those primitive trephiners believed that the "individuality" was maintained after the death of the body; in religious deference to which faith they would not rob him "in the other life of the glorious evidence of the operation which he had undergone in his youth."

But another feature of perhaps even more inexplicable interest is offered by the fact that the great majority of the trephine holes found in the skulls which had been the subjects of prehistoric surgery were placed in the parietal region—over Ferrier's motor area. Since the attention of medical men (and of antiquarians) was directed to this subject by Broca, a large number of cranial specimens have been discovered and described which bear evidence of primitive operative interference of a similar character. Most of the reports are referred to in a neat little monograph on trephining, published by Dr. J. F. Horne in 1894. Many such skulls were found in the famous cavern of L'Homme Mort in La Lozier. Some were discovered in the grottos of Baye. M. Prunèires found, in 1868, in a large dolmen near Aiquiens, a skull, of which a large portion of one side had been removed. M. Chouquet discovered in a mound near Ecuelles, specimens of both ante-mortem and post-mortem trephining. In 1875 a trephined skull was found in a tumulus at Bougon, near Niort, in the South of France. In the cloisters of Guérin, on the Seine, not far from Paris, the skull of an old man was found, which presented a completely filled-in trephine aperture. Several neolithic skulls in corresponding condition were found near Bage in 1880. M. Gassie found a trephined skull in a mound at Entre Roche; M. Guigan another at Etang-la-Ville. In 1878 Prunèires found in Beaumes-Chaudes (La Lozier) more than sixty specimens of trephined skulls. An extensively diseased skull was found in a grotto of the neolithic period, which displayed unmistakable evidence of trephining. A few prehistoric specimens of trephining have been found in Germany. The skeleton of a girl of about twelve years old was discovered in the Bytchiskala grotto in Bohemia; the skull had been the seat of an ante-mortem trephining operation. And in the immense ossarium of Beinhaus, at Sedle, in Bohemia, a great number of trephined skulls have been found. Some have been discovered in a Criquoian cave near Ziemerin, in Poland. A skull was taken from a tumulus at Bogdauoff, Russia, in which an unmistakably ante-mortem perforation had been made. In Denmark one was exhumed from a dolmen at Boneby, and another from a dolmen at Nois, in the island of Falster. A number of very choice specimens have been recovered at Rokina, in Algeria. An excellent one was found in a collection of human remains belonging to the stone age, which was discovered in the grotto of Casa da Mouva at Penicher. The first trans-Atlantic specimen placed on record was taken from the Tuca cemetery in the valley of Yucay, Peru. American experts pronounced the specimen to be of, at least, ante-Columbian date; and the skull was forwarded to Broca. The result of his examination was, that we are "authorised to conclude that there existed in Peru—before the European epoch—an advanced form of surgery." Dr. Robert Fletcher, in discussing this subject, observes that "The numerous specimens which have been found in Michigan suggest several inquiries. Many more prehistorically trephined skulls have been found in Michigan than in any other State of the Union."

Illinois and Ohio come next in order in respect to the number of such discoveries. Either these States have made more researches than others, or the valley of the Great Lakes contained a race of people who practised trephining, just as there is now a race in the north of Africa who practise it, while the other populations do not. The Kabyles of North Africa are, by some anthropologists, thought to be the remains of the ancient Phœnicians. They practise trephining as a purely surgical measure. Michigan has fewer mounds than any of the States in the great central basins of the United States. Everywhere these mounds have been opened and studied, and the results have shown very few trephined skulls outside of this region. The openings in all Michigan skulls, and in fact in all American skulls, have been near the vertex. They have rarely shown any evidence of cicatrisation, and for those reasons are generally believed to have been trephined for religious rather than surgical purposes." However this may be, the net result of all this distinguished observer's inquiries has been to lead him to believe "that the valley of the Great Lakes once contained a people who practised surgical trephining." Broca's original suggestion that the pre-historic operation of trephining was performed with the aid of a piece of flint or shell, has been well borne out by subsequent revelations. He presented to the Paris Society of Anthropology some skulls on which he had produced appearances very similar to those presented by the neolithic ones, by scraping with a piece of glass. It has been critically observed that the incisions of the "Inca skull" from Peru appear to have been made with some cutting instrument, "something like an engraver's burin, and not with a saw." Sir Victor Horsley—in connection with Mr. Crump's paper—showed three photographs of American specimens. He regarded the traces as those of saw-cuts. They were all in the frontal region; and, taken in connection with the recent evidence supplied by Mr. Crump, he thinks that the conditions found give "reasonable ground for believing that the Peruvian operation was probably done for headache."

The short paper furnished by Mr. Crump gives some very interesting new facts, and throws explanatory light on some old ones which had previously been obscure. In New Britain, as he had previously reported, the operation of trephining is performed for fracture—only. The instrument used is formed of a piece of shell or a flake of obsidian, and the operator is the wizard or "tena-papait" of the tribe or district. A blow from a sling-stone is usually the cause of the fracture for which the operation is performed, the sling being the most formidable weapon used by the pugnacious natives in their tribal fights—"a smooth stone as large as a pullet's egg being thrown with moderate accuracy but considerable force." It is found that death almost invariably follows in cases where the injury is not promptly treated. "Injury caused by the stone-headed club is almost instantly fatal, but the flat, two-edged club is not so deadly, and permits of an occasional operation. A V-shaped or Y-shaped incision is made over the seat of fracture; and, while assistants hold back the scalp, any loose fragments are picked out with the finger-nail. The other portions involved in the fracture are then scraped, cut and picked away, leaving the brain exposed to the size of half-a-crown. Then, all loose pieces having been removed, the scalp is carefully laid down and the wound bandaged with strips of banana stalk, about four inches wide. These strips are when dry of a spongy nature, the water which formerly filled the cells being replaced by air. Moreover, the inner surface is silky to the touch, and forms an admirable dressing for tender surfaces. It is astringent in its action and non-absorbent, all discharge escaping below the bandage. Sometimes a few bruised leaves are applied before bandaging. The patient is generally insensible from the time of the injury, and, if consciousness returns during the operation, soon faints away again. In five or six days the bandages are renewed, and in two or three weeks a complete recovery is the result. The number of deaths is about 20 per cent., most of these resulting from the first injury, and not from any complication after the operation. Nearly all the deaths take place during or immediately after the operation, and I am assured that if a patient once becomes conscious he never fails to make a good recovery." And the writer has recently discovered that in New Ireland (Neu Mecklenburg) the operation is also performed for the cure (or relief) of epilepsy, and some forms of insanity which are attributed to pressure on the brain. He has in his possession one skull "which has been successfully trephined in no less than five places, the man meeting his death some years after the last operation by a blow from an axe." This man had suffered from severe, local, throbbing headache. Although the cure would not appear to have been forthcoming, the operation was, in each instance, "successful." He reports a case of cure—at least up-to-date—of an epileptic patient by (or following) trephining. On Gerrit Demp Island and in the central part of New Ireland the usual form of operation—often performed for throbbing or beating headache—is in cutting two or three channels down the frontal bone, each of three or four inches in length.

"After trephining has been performed there is frequent partial temporary paralysis which almost invariably passes away, though in a few cases it is permanent. Idiocy is an occasional result also. But the natives affirm that while the cures of insanity and epilepsy are many, the instances where either malady supervenes after the operation are exceedingly few." The writer forwarded three skulls on which the operation had been performed. The first was a sling-stone case, in which the patient died two hours after the operation without having recovered consciousness. The second was also a sling-stone case, in which the damaged portion (of anterior wall of frontal sinus) had been removed, apparently without the use of instruments—seven years before the patient's death. The third specimen was that of a skull in which a gutter operation had been performed in the region of the frontal eminence for the relief of headache. Sir Victor Horsley points out that it was "almost an exaggeration of a linear osteotomy." There was "an opening made of the inner table in a slight degree." In connection with this case, Mr. Crump informs us that "There are many persons in this village [Olotai, in New Ireland] who have been trephined. It has become fashionable, and a handsome girl or boy is generally persuaded to submit to the operation as an aid to longevity, there being no absolute need for its performance." Such is the present state of our knowledge of primitive methods of trephining—whether pre-historic, or (correspondingly primitive) contemporary. And interesting it is to note in this connection, that the utility of obsidian, which, as Mr. Crump tells us, is so usually employed by the South Sea Islanders in this operation has been recognised in Europe since the dawn of the Christian era. It was first specially described under its present appellation by the elder Pliny. The name was given to it from that of Obsidius, who discovered it in Ethiopia. It is really a natural glass, so far as any substance of volcanic origin can be called "natural"; for it is, in fact, a species of lava. *Trephining—natural glass*—is there anything new under the sun?

THE
BRITISH MEDICAL ASSOCIATION
IN
MANCHESTER.

LITERARY PRODUCTS.

The recent Manchester meeting of the British Medical Association has given occasion for the issue of several notable works, which will prove not only of interest in recalling pleasurable memories, but when this year's annual gathering has been long forgotten will be prized and consulted as works having a permanent value.

The first place must be accorded to Professor Sterling's sumptuous volume on "Some Apostles of Physiology," being an account of their lives and labours—labours that have contributed to the advancement of the healing art as well as to the prevention of disease.

The work is dedicated "To Walter Whitehead, President of the British Medical Association, 1902, Consulting Surgeon to the Royal Infirmary, Manchester, late Professor of Clinical Surgery in the Victoria University and the Owens College, whose love of Art and whose liberality have made it possible to issue this volume in a manner worthy of the event it is designed to celebrate. MCMII." It is impossible to praise too highly this very beautiful and. as we venture to think, unique work. The accounts of the lives of many of those who, directly or indirectly have contributed to the advancement of physiology, or to use the old phrase, the "Institutes of Medicine" are full of interest and characterised by high literary merit, but the plates, which are very numerous, are of the highest excellence. The photogravure of "The Queen's John Hunter" is simply superb. The printing, binding, and general get up of the work makes for distinction, and is worthy of Messrs. Waterlow and Sons.

Professor Stirling has been favoured in obtaining the hearty co-operation of many "physiological friends" in the formation of his galaxy of "physiological apostles," but all who are privileged to see this noble work and fortunate enough to possess a copy will not only render congratulations where these are so richly deserved, but will tender loving thanks for bringing into life again the great human forces which have given to physiology its "Apostolic Age." The work has been privately printed, and we have been favoured with a copy through the courtesy and kindness of Mr. Walter Whitehead and Professor Stirling. We venture, however, to express the hope that means will be found to issue a future edition which may be available for physiologists, students and art lovers throughout the world.

"The Handbook and Guide to Manchester," prepared for the recent meeting, and edited by John Howson Ray, F.R.C.S., is of much more than ephemeral interest. It is a series of essays by experts on matters not only of interest to the casual visitor, but likely to prove of service to all who study phases of life in busy centres. Mr. Sutton, the well-known Librarian of the City, deals with the History and Antiquities of Manchester, while Mr. W. A. E. Axon writes on its Political History. A sketch of the physiographical and geological features of the district is given by Professor Boyd Dawkins. The medical officers of health for Manchester and Salford write on the meteorology and health of their charges. Mr. Thomas Hudson details the development of municipal law in the city. Phases of modern Manchester are portrayed by Mr. Charles Sutton. The parks are described by Alderman Birkbeck and Councillor Ward. The libraries of Manchester are pleasant features amidst much that is gloomy. Several articles describe Manchester as a centre of education, Victoria University being dealt with by Professor Withers. In spite of its ugliness Manchester is not devoid of artistic evidences, as Mr. Phythian seeks to show. The commercial and industrial life is also well presented. Professor Stirling describes the work of the medical school. The Owens College is treated of by Dr. Hartog. Dr. Renaud deals with the medical charities of Manchester and Salford. Other features of interest receive due consideration. The book is well illustrated, but lacks a satisfactory map.

"The Evolution of Artificial Mineral Waters," by William Kirkby, F.L.S., Lecturer on Pharmacognosy in the Owens College, was issued by the well-known house of Jewsbury and Brown, of Manchester. It furnishes an admirable account of the initiation and development of the mineral water industry. Detailed technical descriptions of machines and processes have been avoided as much as possible. It is not intended to be a manufacturer's handbook, but a popular account of how artificial mineral waters came into being and how they are manufactured to-day. The work is excellently illustrated, and furnishes much trustworthy information on a subject in which we are all interested.

The Address of the President was a valuable contribution to the local history of medicine. We hope Mr. Walter Whitehead will see fit to reprint it in convenient book form.

Dr. Lloyd Roberts's interesting address on Manchester's early obstetricians and gynæcologists is worthy to be perpetuated in booklet shape.

France.

[From our own Correspondent.]

Paris, August 16th, 1902.

Ligature of the Axillary Vein.

At the meeting of the Société de Chirurgie, M. Dumoulin related a case of rupture of the axillary vein during ablation of a ganglion in this region. A ligature was placed on the wounded vessel, and the patient recovered without presenting any œdema of the arm.

Foreign Body in the Stomach.

M. Cerné communicated the case of a patient who, ten years ago, swallowed a long narrow spoon, and never felt any inconvenience from it. Ultimately, however, gastric disturbance set in, and palpation revealed the presence of a foreign, quite mobile, body in the stomach. A lateral incision was made through the rectus muscle and the spoon removed without difficulty. No obvious lesion was found in the stomach, contrarily to what might have been expected.

Treatment of Vertigo.

For the treatment of vertigo Prof. Vires recommends special and general treatment. The special treatment should be directed to the different causes of vertigo when they can be traced to affections of which vertigo is but one of the symptoms; syphilis, malarial fever, gout, gastric affections, &c.

As regards general treatment he recommends iodide of potassium, ten to twenty grains daily for months, with periods of rest, and quinine as advised by the late Professor Charcot. However, the quinine should only be tried when other methods fail, as it affects hearing, and leads, if prolonged, to absolute deafness. About six or eight two-grain pills should be given daily for a week. During these days the noises in the ears and the vertigo increase considerably, but if the drug is suspended for a similar period, a notable improvement takes place. Given again for eight days, the quinine produces less effect, and a second rest of eight days is followed by a still more marked improvement. Treatment should be continued in this manner until a cure takes place. The vertigo due to arterio-sclerosis should be treated with small doses of iodide of potassium.

Iodide of potassium, ʒj;
Water, ℥x.

Two tablespoonsful daily for three weeks in the month, at the same time three drops of a solution of nitro-glycerine (1-100) might be given morning and evening, and a milk diet be prescribed for eight days every month, while purgatives should be given frequently.

If tachycardia be present, one or two of the following pills should be ordered daily:—

Extract of convallaria, gr. ij;
Sulphate of sparteine, gr. j.

Insomnia is best treated with trional, and œdema of the limbs by theobromine, ten grains four times a day. If in spite of this treatment the œdema persisted and increased, digitalis should alternate every five days with the bromine, and the patient should be placed on milk diet. A purgative of jalap and scammony should be prescribed once a week.

A Case of Antero-posterior Crush of the Thorax

has been made the text for a very interesting and instructive communication to a recent number of the *Gazette des Hopitaux.* A young man, æt. 20, when in a state of intoxication was crushed against the wall by the wheel of a large vehicle. He was brought into hospital in a state of collapse, with a small, intermittent pulse and irregular staccato respiration. Palpation of the thorax revealed the existence of fractures of the third, fourth, and fifth ribs of the right side, at the junction of the anterior and middle thirds; and of the second and third ribs of the left side near the sternum. Thoracic resonance seemed to be exaggerated on the left side. The area of præcordial dulness appeared normal. There was a cardiac bruit, difficult to describe; but the "bruit de moulin"—characteristic of the effusion of blood and air between the pericardium and inner surface of left lung was not discoverable. This pericardial, or pleuro-pericardial effusion ("epanchement") was suspected on account of the disappearance of a bruit, "de crépitation ou de frottement," which had been noticed when the patient was first brought into hospital. The injured man had passed into a state of somnolence; for a moment he seemed to drop into a state of fatal syncope; the respiration appeared to have stopped, the pulse became almost inappreciable, and the whole surface blanched. From the symptoms Dr. Maclaure suspected that a collection of extravasated blood interfered mechanically with the heart's action; and, accordingly, in order to give him the only chance that appeared available, he explored the cavity of the pericardium. This was done by making an incision from the xiphoid cartilage to the umbilicus, through which the left lobe of the liver was drawn downwards, and the stomach pressed downwards and backwards. The movements of the heart were then visible through the diaphragm, which was now incised at a distance of five or six centimetres to the right of the point of cardiac impulse. Great care was requisite in making this incision on account of the movements of the heart. The pericardial cavity was then explored with the finger through the opening. No traces of extravasated blood were found. Air was drawn into the pericardium through the incision when the diaphragm descended, and expelled during the return movement. The first whiff of air so expelled seemed diagnostic of pneumo-pericardium from a communication established by laceration of both serous membranes. The patient sank at 1 a.m. on the following morning, and the autopsy showed that no such communication existed. There were merely patches of congestion and of ecchymosis—with a slight effusion of blood between the adjacent surfaces of pericardium and left pleura. Dr. Maclaure had, in November last, recommended exposure of the heart through a diaphragmatic opening in cases of chloroform accidents—for the purpose of applying massage directly to the failing organ. He believes that there is a future for this procedure of incising the pericardium by "la voie épigastrique extra-péritonéale," which was recommended by Baron Larrey about a century ago.

The International Central Committee of the Crusade against Tuberculosis meets at Berlin on October 22nd.

Germany.

[From our own Correspondent.]

Berlin, August 16th, 1902.

Abnormalities of the Heart.

At the Medical Society Hr. de la Camp showed six children of a family, two boys and four girls, all of whom showed similar abnormalities of the heart. They were more marked in the girls than in the boys. The heart was dilated laterally, and there were systolic murmurs plainly both to be heard and felt. Left of the sternum a band shaped dulness was present, which showed as a distinct shadow under Röntgen illumination. This could be seen to pulsate. Except measles, the children had had no illnesses, and nothing pointed to any past endocarditis. They were more probably cases of retained ductus arteriosus Botalli.

In a previous discussion it had been pointed out that rachitis played a certain *role* in the occurrence of this abnormality; in the case of weakly children the obliteration of the duct was still further delayed by the rachitis. It was further to be observed that both the girls suffered also from epilepsy, the eldest 17 years of age, was also tuberculous, and one of the boys was very backward mentally—almost idiotic. The father of the children died from accident, and whether he had suffered from any cardiac affection was not known; the mother was healthy.

Action of Albuminous Bodies on Blood Clotting.

At the same meeting Hr. Brat introduced this subject. The action of peptones on the blood consisted, as had been long known, in arresting the clotting power of blood; the blood corpuscles fell to the bottom and the plasma remained fluid, and frequently the blood clotted equably or in mass, but without, as in normal blood, any distinct separation into a blood cake. Antipeptone, tryptone, somatose, as the speaker had ascertained, were not in a position to nullify the peptone action. In a similar way to peptone, as further experiments showed, gelatine and gelaton also acted. If gelatine or gelaton delayed the period of blood clotting, it was very questionable whether their employment as hæmostatics by production of thrombi was correct, and whether there was not really a contradiction in their employment for the purpose. In order to determine he made a series of observations.

Biernacki had shown that the sinking of the blood corpuscles was dependent on the fibrine constituent of the plasma; the greater this was the more rapidly the sinking took place. In peptone blood also the fibrine constituent was increased. The falling of the blood corpuscles was not equable, the blood corpuscles rather clustered together in small lumps. This agglutinating property could be called out by adding plasma of the same animal to the blood employed, whilst an addition of serum had not the same effect. From this he had concluded that chemical changes in the blood corpuscles had called forth this phenomenon of agglutination. It had been proved that the presence of globulin and especially fibrinogen increased the agglutination; in peptone or gelatine blood, according to this, the globulin of the plasma must be increased. Alex. Schmidt had shown that cytoglobin, a constituent of the red blood corpuscle, like the fibrinogen of the plasma delayed clotting. From this was explained the contradiction that the bodies named delayed the period of blood clotting and yet were of therapeutic value in the formation of thrombi.

On the living animal, after injury of the intima of the carotid there was a stronger thrombus formation when the animal had been injected than when it had not. After ligature of the vessel without injury to the intima a thrombus formed about the site of ligature only in animals that had been injected.

As the clots after injection of albuminous bodies did not contract, there was a better possibility of their becoming organised from the endothelium of the vessel against which they lay.

At a previous meeting Hr. Krönig introduced the subject of

LUMBAR PUNCTURE IN THE TREATMENT OF PURULENT MENINGEAL EXUDATIONS.

A young man suffering from the spinal form of purulent meningitis had recently been admitted into his department. He had slight headache, but great stiffness of the neck, moderate fever and slowing of pulse, contracted abdomen, &c. By lumbar puncture a pressure of 500 mm. was indicated. The fluid withdrawn was purulent and contained the Jager-Weichselbaum bacillus. Eleven ccm. of fluid were withdrawn and another puncture made a few days later. This time the fluid did not rise in the ascending tube, and not even when aspiration was used. A small quantity of saline solution was now allowed to flow in drop by drop; after a few days pus came; the discharge then stagnated, when some drops were again instilled, and in a short time 6 ccm. had been got in.

After two days another puncture was made, and the exudation was now almost clear, a few pus cells could only be distinguished microscopically, and in another couple of days these also had disappeared, and the patient was now quite well. The speaker believed that the absorption of the pus would not have been possible except for the dilution, and that a chronic meningitis had been prevented by it. Instillation, if carried out carefully, was free from danger, but it could only be useful in the spinal form of meningitis.

Austria.

[FROM OUR OWN CORRESPONDENT.]

VIENNA, August 16th, 1902.

CHRONIC NEPHRITIS, PERICORDIAL ADHESIONS, ETC.

AT the "Verein Deutscher Aerzte," Liebscher showed preparations of the liver, spleen and cardia from a young woman, æt. 26, who had died after three months' illness.

About a year ago she suffered from a heart affection, and the diagnosis of her condition comprised mitral insufficiency, chronic nephritis, pericardial adhesions, chronic localised peritonitis, pulmonary tuberculosis, albuminuric hæmorrhagic cystitis, and she ultimately died of general dropsy.

Liebscher assures us that the clinical diagnoses were confirmed by post-mortem examination. The peculiar interest of the case lay in a punctiform deposit of calcareous matter throughout the body, which was easily demonstrated with the microscope. It was found in the intima of the arteries extending in many places to the deeper structures of the vessel. The calcification seems to have been at first located only in the fibrous tissues, and becoming retrogressive it was absorbed and redeposited in the internal organs, which gave a gritty feeling to the heart, spleen and liver at the post-mortem. This led to a closer examination of the tissues, particularly in all the serous and mucous coverings.

In regard to the ætiology, it is assumed that the kidneys became early affected, and chalk being locally deposited and then absorbed was locating in the blood at the time of the renal attack, being arrested and deposited in the mucous and serous membranes, as it was present in equal amount in the bronchi, alimentary canal and internal ducts, but *not in the veins*, as the presence of carbonic acid in the venous blood would prevent any deposit by holding the chalk in solution.

PERLSUCHT OR DIPHTHERIA?

Weleminsky showed a pleura and pericardium with "perle" nodules which he had taken from a cow, and which yielded typical tubercle bacilli as well as diphtheritic bacilli repeated in pure cultures. After different tests of colour and animal injections it was concluded that the bacillus was a degenerate form or pseudo-diphtheritic bacillus, as it had no virulence when injected into guinea-pigs, and did not react to Neisser's staining.

He also showed three preparations of actinomycosis of the lower jaw in cattle, from one of which he obtained a brick-red form, which seemed to be a degenerate variety.

TETANUS.

Zupnik related the history of a case of tetanus presenting many points of interest. The patient was a male, æt. 42, who, in consequence of a fall from a scaffold, sustained fracture of the sacral bones and extensive contusion, which caused paralysis of the lower part of the body, and subsequently acute purulent cystitis, associated with hæmorrhage. A 2½ per cent. solution of gelatine was injected to relieve the symptoms, but thirteen days later an unexpected attack of tetanus set in. Within twenty-four hours from the first appearance four full doses of Behring's antitoxin were injected, but in spite of every effort to relieve he died, after forty hours' suffering. The tetanus bacillus was found in the urine during life as well as on the surface of the mucous membrane after death. Its cultures were made and injected into animals with a positive result. The tissues in the neighbourhood of the wounds were examined with a negative result so far as the presence of the tetanic bacillus was concerned.

Zupnik concluded that only one hypothesis of the entrance of the toxin was admissible, viz., by the bladder from the gelatine, which he said would be the sixth recorded case from the same cause. He would therefore propose that henceforth all gelatine for medical use should be carefully sterilised before being employed.

He further added that the lower extremities, which had been four weeks paralysed by the accident, remained quite free from the muscular spasms, and this, he thought, confirmed the pathogenesis of the disease, as the paralysed muscles, being inactive and in a condition of degeneration, were virtually cut off from the body. Sero-therapy must be considered useless, he said, as the quantity required in animals varied with the sensitiveness of the animal; for example, an infected guinea-pig on the first symptoms had 250 A. E. injected, which is taken as the unit or standard, as to which man is calculated to be ten times more sensitive, an estimate which leaves the experiment somewhat indefinite. Repeated doses are worthless.

Another example actually under observation may be recorded where 1,000 A. E. was administered in puerperal tetanus without the slightest effect.

Chiari remarked that tetanus sometimes became epidemic, as it did recently in the Lying-in Hospital of Prague, thus proving the presence of the tetanus bacillus in the floor of all the wards. In this way instruments, if not carefully sterilised, might convey the germ.

Hering asked whether the gelatine injection used was examined for the tetanus bacillus, and whether any of it had been injected into animals. He expressed himself dissatisfied with the explanation of the cord lesions being attributed by Zupnik to degeneration of the muscles. If the contractions came from the cerebrum it is evident that they would not reach the legs, as the nervous connection was divided in the lumbar region, and all motor impulses cut off. It is generally understood that the brain is the principal habitat of the tetanus bacillus, which would not have involved the cord at death.

Bonn had no doubt about the presence of the tetanus bacillus on the ward floors, and thought not only gelatine should be sterilised, but also the linen, bandages, &c., which were just as dangerouss in wound and during parturition.

Weleminsky referred to the ubiquity of the germ, and to the occurrence of epidemics which he thought ran parallel with typhoid and scarlet fever, which led him to believe that sanitation had much to do with the occurrence of these fatal cases. Removal of sewage or anything that tended to lower the vitality was the best means of sterilising, while the best prophylactic was to immunise with tetanus serum, but it must be sterilised at the time and not kept in stock. Personally, he thought he had got as good results from the testicular juice of the horse.

Schwarz urged that nothing short of repeated boiling of the gelatine was effectual to obtain sterilisation. He had lost a patient recently owing, he believed, to the bacillus or ova not being quite destroyed before use. It was a severe case of melena neonatorum, gelatine was injected with the best result, but the germ lurking in the clot induced tetanus shortly afterwards with a fatal result.

The meeting finally agreed to Zupnik's proposition that pharmacists should keep nothing but perfectly sterilised gelatine for immediate use.

The Operating Theatres.

NORTH-WEST LONDON HOSPITAL.

Malignant Disease (Epithelioma) of Antrum.—Mr. Mayo Collier operated on a woman, æt. 63, the subject of a large malignant growth of the left upper jaw. This growth had apparently commenced in the antrum, and had extended downwards so as to involve most of the alveoli and adjacent portions of the bone. It extended from the left lateral incisor tooth to the last molar, and was invading the palate and outer aspect of the jaw. An examination of a small portion of the growth proved it to be of the epitheliomatous type of malignant disease. A pin having been previously passed under the facial artery, which was then compressed by a loop of silk, an incision was made in the middle line of the upper lip and carried round the alæ nasi to the margin of the orbit, and from thence outwards to the root of the zygoma. Mr. Collier rapidly removed the soft tissues from the upper jaw without encountering any troublesome bleeding. Care was taken not to open the nose cavity in removing the flap from the side of the alæ nasi. The central incisors having been removed, the saw was introduced into the nose, and the hard palate divided in the middle line. The malar bone was next sawn through, and the incision carried into the outer wall of the orbit with a pair of fine bone cutters. The nasal process of the superior maxillary bone was the last to be divided. The orbit with its contents was gently lifted up from the orbital plate of the superior maxillary bone, and the soft palate carefully separated from the hard palate with curved scissors. Up to this there was no trouble with the bleeding or difficulty with the anæsthetic during the operation, the patient, having been kept on her left side with the head slightly dependent. The whole upper jaw being now free, it was grasped and removed entire, without fracturing any of its surfaces. The soft parts were carefully adjusted, and the patient returned to bed with the face downwards, to facilitate drainage. Mr. Collier remarked that this was an unusual growth. It had evidently commenced in the antrum and after nearly filling the cavity had extended downwards so as to involve the avleoli and adjacent parts of the palate and jaw. Although serious difficulty with the bleeding and with the removal of the softened upper jaw was to have been anticipated, with a little care both these troubles had been avoided. He pointed out that the temporary occlusion of the facial artery was a great help, and the position of the patient facilitated the rapid performance of the operation without fear of suffocation from the entrance of blood into the respiratory tract.

Irish Medical Schools' and Graduates' Association.

The summer general meeting of the above association was held at Owens College, Manchester, on Wednesday, July 30th. In the absence of the President (Sir Philip Crampton Smyly), the chair was occupied by Dr. Richard Fegan (Blackheath). Among the other members present were Drs. P. S. Abraham, J. Chestnutt (Howden), W. Douglas, Stanley Gill (Formby), Sidney Gramshaw (Stillington), T. Adrian Greene (Ennis), J. Mills (Ballinasloe), A. Morton (Halifax), J. Goodwin Shea (Chesterfield), Oscar Wood (Cork), and the two honorary secretaries, Dr. J. Stewart (Clifton) and Dr. J. H. Swanton. The Council reported that Wednesday, November 26th, had been fixed for the banquet to be given to the Commander-in-Chief by the Association, at the Hotel Cecil, London, and that the Countess Roberts and their daughters had also accepted invitations to dine on that evening. The Council also reported that a considerable accession to their numbers had been made since the annual general meeting, and that there was a prospect of the total number of the roll reaching 1,000 members before the date of the banquet to Earl Roberts. A vote of thanks to the Council of the College for the use of the room terminated the proceedings.

Women Doctors in Germany.

During the years 1901 and 1902 only one lady took her degree as a doctor at the Berlin University, but altogether during last year no fewer than fourteen ladies have taken medical degrees at German universities. Of these lady students only six were Germans. Five passed at the Halle University, three at Heidelberg, two at Göttingen, one in Berlin, one in Breslau, one at Freiburg, and one at Munich.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 20, 1902.

THE VACCINATION MOVEMENT.

IT is really high time that the problem of ensuring universal and efficient vaccination should be removed from the sphere of politics and brought back to its proper domain—that of intelligent public opinion. Londoners have had a sharp lesson in the epidemic upon which the hatches are now well-nigh closed down. It will have taught them, and through them the world at large, with what readiness small-pox spreads among an imperfectly protected community, and with what difficulty its spread is checked, in spite of a system of notification, removal and isolation unsurpassed anywhere in the world. The cost of even this comparatively small epidemic—small, that is, compared with the number of inhabitants—has added half a million sterling to the burden of the ratepayer, who can derive little satisfaction from the reflection that he is paying the penalty of ignorance, indifference and neglect. Small as it has been, compared to what it might have been, this epidemic has cost 1,500 lives, besides endangering and probably embittering nearly 8,000 more. There is an universal consensus of opinion among those best qualified to judge as to the protective influence of vaccination, and every succeeding epidemic affords conclusive and irrefragable evidence of the immunity of the vaccinated; yet, in this country, owing to the exaggerated influence of a small but active minority, the enforcement of this invaluable safeguard is subordinated to purely political considerations. Under these circumstances, we are pleased to chronicle the formation of the Imperial Vaccination League, with the declared object of promoting the study of the laws regulating vaccination, in view of such improvements and modifications as may appear desirable. The Vaccination Act (1898) expires at the end of next year, so that fresh legislation of some kind will become necessary within the near future. The experience obtained in Germany, where vaccination and revaccination are rigidly enforced, affords ample justification for a determined effort to avert future epidemics of small-pox in this country. It is not proposed to go back on the exemptions at present accorded to "conscientious objectors," though no doubt steps will be taken to remove the irritating ambiguity of the present law in reference to this creature of prejudice. The number of children who have escaped vaccination since 1898 has considerably diminished under the new dispensation, although in three years (1898-1900) some 276,000 passed unhindered through the wide mesh of the law. It is generally recognised that something must be done to encourage, and, if possible, to enforce, revaccination, and this could be done by providing for the compulsory revaccination of school children at a specified age, a plan to which the freedom from small-pox in Germany is in large measure due. Then, too, the whole system of administration of the Vaccination Laws will have to be reconsidered. Public opinion, on the whole, seems to be favourable to the transference of authority from the guardians to the local sanitary authority. In this way the question of vaccination would be eliminated from the sphere of parochial politics, and the measure would be methodically enforced, just as with any other sanitary precaution. Then, too, it behoves the Government to make adequate provision for a supply of standard vaccine lymph. It is little short of scandalous that the medical profession should be left to the tender mercies of foreign institutions without any attempt to control the activity and the prophylactic efficacy of the products sold by them. Incidentally, no doubt, the desirability of perpetuating the office of public vaccinator under existing conditions may be called in question. The matter is one of national interest, and ought not to be left in any degree at the discretion of local authorities; indeed, the propriety of creating a special central department expressly to carry out the Vaccination Laws, is one of the questions to be considered by the League. One of the first duties of such a body would be to define "efficient vaccination," and to take steps to secure that standard of protection. The League will work in harmony with the Jenner Society, which has done so much good work since its foundation at the time of the Gloucester epidemic, and if it receive suitable financial support, much can be done in the direction of educating public opinion by the time the subject comes before Parliament. The influential list of signatories to the initial statement published by the League will command the respectful attention of all who are not blinded by unreasoning prejudice, and its propaganda will certainly receive the hearty and practically unanimous support of the medical profession. Let us then be up and doing!

TRADE UNIONISM AND THE MEDICAL PROFESSION.

THE attitude of journalists, as a class, can hardly be called sympathetic with regard to the medical profession. Otherwise we should not find them ready at every opportunity to hurl the taunt of trade unionism at the devoted heads of the "doctors," as the man in the street loves to call his learned medical advisers. In this way many of the points discussed at the recent meeting of the British Medical Association have drawn forth the familiar sneer in question from newspaper men on all sides. Thus a leading Liverpool journal says that the Association fulfils at least some of the functions of a trade union. Unfortunately, the accusation is not sustained by particulars, so that it is impossible to discuss the grounds on which it has been advanced. Clearly the imputation of a spirit of trade unionism is intended to convey more or less serious reproach, and it may be well therefore to consider calmly and reasonably what is the inwardness of this attitude on the part of a large section of the lay press. The definition of trade unionism is simple enough; it may be taken to mean the organisation of any given body of persons engaged in a particular pursuit, for the protection and furtherance of their peculiar common interests. In that sense trade unionism has been an enormously potent factor in the social life of the community. Although a weapon of modern introduction, at any rate as applied by the masses, it has played a most important part in the welfare of the industrial population of the United Kingdom. To take a particular instance, say, that of the colliers; by organisation they have secured for themselves reasonable hours of labour and a fair living wage. In the days before the principles of trade unionism had been grasped by the artisan his lot was for the most part deplorable. The results of trade unionism, then, have certainly sufficed to show that the movement is able in some instances to enforce what may be termed the natural rights of the workpeople engaged in various trades. So far, there would not appear to be anything heinous even if trade unionism were adopted forthwith by the medical profession, which has its interests to protect no less than other professions and pursuits. As a matter of fact, the lawyers have long established a trade union of the closest texture, with rules of the most stringent and detailed kind. In their case they have taken care to secure protection of their professional interests both by adequate legislation and by the machinery of what is probably the strongest trade protection society, if we may use that term, in the world, namely, the Incorporated Law Society. The result is that unqualified legal practice is practically non-existent in the United Kingdom. That is trade unionism with a set purpose and a definite outcome, yet we never hear the newspaper men inveighing against the lawyers and their trade unionism. What then, is the difference as regards the medical profession, which is protected with feeble laws and by an invertebrate and non-representative General Medical Council? The difference is that there is practically no protection of the interests of the medical profession. They are faced with wholesale competition from unqualified practitioners, and from the medical charities themselves, their fees are inadequate and often depressed to starvation pitch from sheer lack of common-sense organisation of the kind that has long ago been adopted by miners, and carpenters, and lawyers, and other sections of the community. If the evils springing from a lack of organisation are to be met with an application of the principles of trade unionism, then there is much to be said in favour of establishing medical unions of that nature forthwith. The fact of the matter appears to be that the public has got accustomed to the unbusinesslike muddle in which the medical profession keeps its domestic affairs. The journalists simply echo that sentiment when they sneer at any attempt on the part of medical men to remedy some of their manifold grievances. We should like to know how much benefit the journalists have derived from their own trade union? Apparently for some mysterious reason the medical profession alone is to be denied the right of organisation to protect its professional rights. The sooner medical men face the matter squarely and call a spade a spade the better for the dignity, the honour, and the social and material welfare of the profession as a whole. Let them have their Incorporated Medical Society on the model of that of their legal brethren.

PROGRESS IN RENAL DIAGNOSIS.

The endeavour to devise some trustworthy means and method of obtaining the urine of either kidney separately has for some years exercised the intellectual and mechanical skill of a good many surgeons. And very deservedly; for the object is one of the most important for obtaining a trustworthy diagnosis and prognosis in many obscure cases of renal trouble. The condition of "the other kidney," in many cases which suggest nephrectomy, cannot by any known means be even approximately guessed at without obtaining an unmixed specimen of the secretion of the latter. Simon, "the first surgeon to deliberately do the operation of nephrectomy," recognised the importance of obtaining the renal fluid from a single ureter, and for this purpose suggested compression of the other ureter against the brim of the pelvis—by the hand introduced into the rectum. Davy's lever was afterwards substituted for the hand. Next appeared Ebermann's forceps, which was made to compress the ureter between one blade in the bladder and the other in the rectum. Tuckmann's forceps was introduced into the bladder, and with it the vesical end of the ureter was seized and compressed. Then came Polk's S-shaped catheter, between which and a finger in the rectum the ureter was seized and occluded; next arrived, for female patients, Silbermann's vesical rubber bag, which was arranged on one side of the bladder and then filled with mercury for gravid pressure on the end of the ureter on that side. Fenwick's curved catheter with a lateral orifice was made to catch the urine as it escaped from the ureter. Neumann invented a double catheter, the canals of which were intended to draw off the urine, respectively, from two vesical pockets made by the forward pressure of a finger in the rectum. Hegar suggested cutting down upon the ureter in the anterior vaginal fornix, when it could be directly compressed. Ventral cœliotomy was advocated by some surgeons; Edebohes, so late as 1898, recommended exploration of the kidney through the loin, and Mr. Henry Morris, in his recent book, teaches us that it is more desirable to explore each kidney through the loin than to expose the ureter to infection by direct catheterisation. Simon devised a speculum which was introduced into the bladder, by means of which light was reflected and utilised in catheterisation of the ureters; and Howard Kelly introduced, and successfully practised, some improvements in his method. All these procedures, except that of Howard Kelly, have now been abandoned—and deservedly so. There is no doubt that the extreme difficulties and—very obvious—dangers which attend catheterisation of the ureter make it an unsatisfactory and undesirable procedure. The whole subject has been made the text of an important and well-thought-out communication to the *Australasian Medical Gazette* (May 20th, 1902) by Mr. H. L. Maitland. This writer judiciously indicates the difficulties and dangers of ureteral catheterisation, and recommends for the examination of the separated urine the recently devised "segregator" of Professor Malcolm Harris, of Chicago. This instrument consists of two metallic catheters enclosed in a sheath. When so introduced into the bladder, they are separately rotated till the respective ends dip into pouches formed on either side of a longitudinal projection produced by the pressure of a septum introduced into the rectum—in case of a female patient, into the vagina. The distal ends of the catheters have, each, a small bottle connected to it by tubing; from which the air is then abstracted by means of a bulb. There is, of course, some danger that the secretion so obtained on either side is not quite pure and unmixed; or the tricklings from the lining of the bladder cause some impurity—both from the previous contact of the mixed renal secretion, and from that of the vesical mucous membrane, if abnormal. But with repeated examination these objections can be pretty fully removed. Mr. Maitland is satisfied that the results are trustworthy—by demonstration: first, in the case of a patient with but one kidney, from whom the other had been removed; and, secondly, by the facts elicited in connection with subsequent operation. His conclusions, with which we entirely agree, are as follows:—"The segregator will aid in making a diagnosis in any of the following conditions:—First, in pyuria it will establish the source of pus. Secondly, if the pus be renal in origin, it will show us from which side it comes. Thirdly, in hæmaturia, if it be renal in origin, it will also tell us from which side it comes. Fourthly, it will aid in localising obstructions to the ureter, and determining whether such obstruction be permanent or intermittent. Fifthly, it also establishes the presence of both kidneys. Sixthly, it will aid us in a differential diagnosis of some abdominal tumours. Seventhly, it also enables us to find out the capacity for secretion of each kidney." In conclusion, we feel it our duty to express the opinion that Mr. Maitland's communication speaks highly for his own surgical enthusiasm and attainments, and for the progress of surgical knowledge in the far-off Australian Continent.

Notes on Current Topics.

Cancer in India.

The subject of the extent and prevalence of cancer in India, which has recently been receiving a good deal of attention, is dealt with in an interesting and instructive article by Captain W. I. Niblock, I.M.S., in the May number of the *Indian Medical Gazette*. The data are extensive, and consequently important and instructive. Captain Niblock has gone carefully through the registers of the Madras General Hospital, and "noted down all cases of carcinoma, sarcoma and rodent ulcer which have been admitted into the hospital during the past ten years. I have also made out a separate list of cases shown as suffering from 'malignant disease,' which term I take to be synonymous with 'cancer' in its broader sense." Among the very interesting results obtained by this investigation we find that "carcinoma of the cheek alone accounts for almost one-third, and carcinoma of the cheek, jaws, and tongue, taken together form more than one-half of the total admissions. The cheek is the part most commonly affected in Hindus and Mahommedans, males and females. The disease affects the buccal surface of the cheek, generally commencing opposite the teeth of the lower jaw and spreading with varying rapidity." Captain Niblock refers the frequency of cancer in this position to the national habit of chewing betel. This item of Oriental luxury is said to be made up of "(*a*) the *essential* constituents—viz., betel leaf, areca nut, and caustic lime (chunam); (*b*) *condiments*, such as cloves, nutmeg, cardamoms, cubebs, &c. Dry powdered cocoanut and oil are also sometimes added. The above components are mixed in varying proportions, rolled up in a betel leaf, and placed in the mouth. They are then chewed and rolled about by the tongue and cheek for a period varying from ten to thirty minutes, and then spat out." Cancer of the cheek is specially prevalent on the West Coast—particularly in Malabar. This great frequency is ascribed by the writer partly to the fact that the people of that part of the peninsula are in the habit of chewing betel which contains a large proportion of caustic lime. So that the chewing of betel in India corresponds to the smoking of the short black *dhudheen* in Ireland, as a cancer-generator. We must, however, also observe that Captain Niblock notes that "on the West Coast the chewing of tobacco is also very prevalent." Another fact offering an interesting contrast is that "*rodent ulcer*" is "extremely rare in the Madras Presidency." Yet another specially significant item of contrasted information is supplied by the fact that there were 201 admissions for cancer (epithelioma) of the penis, all of whom were Hindus—there was not one Mahommedan. The Hindus are not circumcised except in special instances, whereas all the followers of the Prophet are submitted to this operation at an early age. The value of the hygiene of circumcision, especially in the lower orders, may be said to be proved by this evidence alone.

The King's Visit to the College of Surgeons.

Last week his Majesty paid a visit to the museum of the Royal College of Surgeons of England, and although the visit was strictly private we are probably not committing any indiscretion in stating that its object was to enable his Majesty to understand more fully, from an examination of the numerous specimens of appendicular lesions contained in the museum, the nature of the affection which has cost him so much suffering and the nation so much anxiety. He was accompanied by Sir Frederick Treves, who no doubt explained the anatomical and pathological peculiarities of this disease, which, so far as as our knowledge of it goes, is distinctly of recent creation. This is probably the first occasion on record on which a member of the Royal Family has directed his attention to the, to the general public, gruesome collection which owes its inception to the enthusiasm of the great John Hunter, a collection which possesses associations other than genial for many practitioners who, at some period in the unforgotten past, have been subjected to the ordeal of naming possibly the very specimens which Sir Frederick Treves discoursed on to his Majesty, presumably in tones very different to those which he assumes when his audience is limited to a mere candidate for the diploma of membership.

Curious Censure of an Asylum Staff.

Broken ribs in asylum patients demand most careful investigation as to the way in which they have been caused, and the frequency of their occurrence in any given institution forms a serious indictment of its methods. At the same time it is absolutely impossible to prevent the occasional fracture of ribs in violent maniacs. So far as can be judged from a perusal of the account of an inquest reported in another part of the present issue the five broken ribs found post-mortem in deceased belonged to the unpreventible margin. The patient appears to have been in such a condition that he fought everyone he came near, including the police who brought him to the asylum. He was there placed in a refractory ward, where he at once knocked down an attendant and engaged in a desperate fight with another patient, by whom he was seriously knocked about. It was only after these exhibitions of violence that he was placed in a padded room. The jury probably were influenced in their verdict by the fact that so dangerous a patient was turned loose into a ward with other inmates. At any rate, they censured the officials, and explained that they meant to include both medical staff and attendants in their censure. The verdict would hardly be sustained by a Court of Appeal.

The King's Sanatorium.

The fact that 180 schemes for the King's Sanatorium were submitted for competition is abundant proof of the widespread practical interest which is now being taken in the rational treatment of the consumptive. It is satisfactory to find that the fortunate physician who has gained the first place in the international competition is an Englishman, and although perhaps slow to initiate new movements as a people, when thoroughly moved we certainly "take a deal" to stop us. We suppose the prize schemes will be duly published, but we venture to suggest that much benefit would accrue from the publication of all the schemes submitted, or at all events all except those that are manifestly worthless. The minds of physicians and architects are being turned to the matter in all parts of the world, and suggestions and material for criticism of all kinds are to be welcomed. We trust that means may be found for the publication of all the schemes worthy of consideration, without delay.

Mortality Returns of Animals.

Man spends much of his life in close association with domestic animals. It is only of recent years that we have begun to realise the importance of the spread of disease from animals to man, and at present we know but little regarding the converse. Comparative pathology as a serious study is but of yesterday. Our knowledge of human ailments is still very limited. The mortality returns as regards man are ludicrously imperfect. But the time will doubtless come when haphazard procedure will give place to methods directed with scientific precision. And meanwhile it may be well for us to remember that it will be necessary to secure sooner or later adequate returns as to the diseases of animals, and at least approximate statistics as to the mortality among domestic animals. Is it not possible for some enthusiast to attempt some such unauthorised return in a village or sequestered hamlet where every dog and horse is as well-known as the few inhabitants?

The Coronation Gift.

The Coronation Gift, amounting to £115,000, has been presented to his Majesty by the Lord Mayor of London, who expressed the pleasure he felt at the fact that the tribute embraced the offerings of the poorer classes of his subjects equally with those of the rich. His Majesty added that his object was to free the hospitals from debt, a purpose which, until it was accomplished, he should not cease to strive after.

De-nicotined Tobacco.

WE learn from a contemporary that a German chemist, Herr Gerold, has discovered a means of preventing the ill-effects which sometimes arise from the excessive use of tobacco, which is liable to produce attacks of vertigo, a particular form of dyspepsia, palpitation, and diseases of the chest. His procedure consists in steeping the leaves of tobacco, before being made up, in a solution of tannic acid, which combines with the nicotine and forms a substance quite inactive and harmless. In order to increase the flavour of the tobacco, it is then treated with a decoction of marjoram. The flavour of the tobacco prepared as above described differs in no way from that of ordinary tobacco; and experiments made with it on weasels, frogs, and even human beings, have demonstrated that its use produces no toxic effects on the organism. The pressure of the blood remains normal, the heart beats regularly, and the paralysis which overtakes animals who have been poisoned with nicotine is entirely obviated. Our contemporary adds that all smokers will hail with satisfaction the discovery of Herr Gerold. We fear that, as a smoker, we can scarcely agree with this optimistic statement. Supposing that Herr Gerold succeeds in removing all the nicotine, what is left? We doubt that the vast proportion of tobacco smokers suffer from consequent dyspepsia, palpitation, and diseases of the chest, and believe that they will prefer to continue the use of tobacco than to adopt Herr Gerold's substitute. If, on the other hand, a smoker does suffer as our contemporary suggests, he had better refrain from the "noxious weed" altogether.

The Educational Number of "The Medical Press and Circular."

THE Educational Number of THE MEDICAL PRESS AND CIRCULAR will appear in the second week of September, a fact to which we beg to draw the attention of Hospital Registrars and Secretaries of Medical Boards. This number will, as usual, contain all necessary particulars and information regarding the medical curriculum which may be of use to intending medical students, and will devote special space to notices of the different hospitals and medical schools. In order that we might be able to lay the latest information regarding these various schools and hospitals before our readers, we some time ago sent to the secretary of each of them a copy of the paragraph dealing with their school or hospital which appeared in our last Educational Number, with the request that all needed alterations should be made, and the slip returned to us. Some of these slips have been returned, but up to the present others have not been returned. We would point out to the secretaries of those hospitals from which returns have not been received that it is to their own interest that all information regarding their hospitals should be as accurate as possible and that we cannot be responsible for errors if no return is sent to us. Following the example of other journals, we shall in each case mark with an asterisk the names of hospitals from which returns have not been received. All such returns must reach the office of the Journal before September 1st, otherwise they will be too late for use.

Municipal Humanised Milk Depots.

ON many occasions we have advocated in this journal the importance of establishing depôts for the sale of sterilised humanised milk to the poor. The number of infants who die from diarrhœal diseases of a removable origin in our large cities is appalling, and has so far been unaffected by the best wishes of humanitarians. The futility of lessening this mortality by such well-meaning efforts as the instruction of the mothers as to the necessity for suitable infant food, without at the same time providing them with such food, is recognised by most people, but so far, with one exception, few attempts have been made to remove this stumbling block. The Borough Council of Battersea have established municipal depôts for the sale of sterilised "humanised milk" exactly on the lines which we have advocated, following the example of Manchester. The milk is supplied in stoppered bottles, each of which contains sufficient for one meal, and from six to nine of these are fitted into a small wire basket. The cost of a week's supply is one shilling and sixpence, or about twopence-halfpenny per diem. The Battersea Borough Council are certainly to be congratulated on having adopted the only practical means of diminishing infant mortality in their district. Is it too much to hope that the Municipal Councils of some of our Irish cities will spare sufficient time from political matters to enable them to look after the well-being of the youthful population in their charge?

Testicular Cyst containing Acari.

To the many dangers which attend the passage of an imperfectly asepticised catheter must be added a new one, the possibility of carrying living acari into the urethra. Mr. R. J. Pye-Smith, F.R.C.S., in the current issue of the *Quarterly Medical Journal*, records a unique case in which a colony of acari of a hitherto undescribed species was found in the contents of a testicular cyst in the neighbourhood of the epididymis. The patient, a medical man, had spent a short time in India, whilst there he had been catheterised for retention of urine, and not long after that the cyst appeared. Mr. Pye-Smith tapped the latter and drew off two and a half ounces of a watery fluid, part of which he sent to Dr. Hector, University College, Sheffield, for examination. On microscopical examination a single drop of the fluid spread on a slide showed on an average ten acari in each field, and also rounded bodies which were probably ova. Recognising that the acari were specimens of the itch mite, and being unable to identify them, Dr. Hector sent them to Dr. E. Trouessart, of Paris, who has made a study of this special field of biology. In the course of a long report Dr. Trouessart says that he was convinced that the acarus was a sarcoptide, of the sub-family Tyronliphinæ (Sarcoptides detriticoles), nearly related to Histiogaster carpio, Kramer, but a new variety, which he proposes to call Histiogaster spermaticus. The acarus had probably been introduced along the catheter, and passed thence on to the urethral mucous membrane, from which it had journeyed along the ejaculatory ducts and vas deferens to the epididymis.

Carcinoma a Cause of Appendicitis.

Among the etiologically distinct diseases grouped under the term appendicitis, primary carcinoma of the appendix is one which has of late attracted some attention. The existence of a primary malignant condition of the mucous membrane and its extension to the other structures of the appendix has been established in about thirty cases, but in only ten or eleven was the disease obviously limited to that organ. It is impossible to decide the exact relationship of the carcinoma to the appendicitis, and we are fain to fall back upon the generally received view that chronic irritation favours malignant degeneration. The fact that in a large proportion of the cases surgical intervention, with ablution of the diseased appendix, afforded permanent relief, suggests a doubt as to the trustworthiness of the diagnosis based, as it is, purely upon microscopical examination of the tissues. Useful as are the data afforded by the microscope it is a matter of common knowledge that such evidence falls short of absolute certainty, and clinical observation not unfrequently belies the prognosis based on microscopical examination.

Grape Juice.

The unfermented juice of the grape, taken in large quantities, produces very marked physiological effects, advantage of which has been taken in the treatment of various diseases. Experimental investigation shows that its administration is followed by a marked increase in the secretion of urine, the acidity of the urine being reduced not only qualitatively but absolutely, the proportion of uric acid undergoing considerable diminution. On the intestinal tract it acts as a laxative, and it is also stated to restrain intestinal fermentation, this no doubt being a collateral result of its evacuant properties, and not directly due to any antiseptic action of its own. In virtue of the large proportion of glucose which the juice contains in solution, it economises the metabolism of the nitrogenous elements of the tissues and thus favours the deposition of fat, a fact worth bearing in mind in the treatment of diseases accompanied by rapid wasting, such as tuberculosis. Incidentally it stimulates the hepatic functions and promotes the secretion of bile. The "grape cure" is very beneficial in various types of dyspepsia, especially those associated with constipation Although best carried out in countries where the vine is a staple article of cultivation, the treatment, in a modified form, is available anywhere.

"Pneumonia Blouses."

Nothing is more difficult to ascertain aright than the effect of dress on the health of women. If pride is never hurt, then surely fashion never fatigues and dress is faultless of disease. But at the dictates of fashion an important experiment has been conducted on a large scale this summer. For many generations the demands of evening dress have necessitated free exposure of the feminine thorax, but during recent months adequate covering of the chest of most women has been conspicuous by its absence even during morning shopping and at afternoon garden parties. And this custom has prevailed when the manly bosom has sought protection in wraps and overcoats. "Open-air" treatment, it would appear, is to have a wider significance than we have hitherto thought. We are quickly learning to shake ourselves free from ancient medical prejudices and to discard old-time hygienic considerations. Contempt for much of the so-called sanitary counsels of the past has given rise to unwarranted and reckless indulgence in "natural" methods and "savage" customs. The question now awaiting answer is how far such "exposure" procedures are to be considered detrimental to health. In short, do "pneumonia blouses" merit their name? Experiments have shown that the direct action of cold upon the skin is capable of producing extensive irritative changes. Ice applied to the thorax or abdomen will produce marked congestion of the bronchial mucous membrane. Exposure to cold and draughts after violent exercise or when the skin is acting freely is said to be a fruitful cause of bronchitis and lung trouble. But can such evils occur to a woman arrayed in a dainty, low-cut, fashionable blouse? We trust some of our readers may be able to throw light on this interesting pathological problem.

Objectionable Advertisements in Religious Publications.

It is, unfortunately, only too true that parsons and retired military men often prove the warmest supporters of "quackery." Doubtless more or less adequate explanation of the fact might be presented, but to afford such is not at present our purpose. We wish merely to direct attention to the widespread prevalence of objectionable advertisements in so-called religious publications. Papers which should have been guided by the highest ethical considerations have permitted their advertising columns to become the means for unscrupulous persons to practise the most cruel frauds upon the poor and ignorant, many of whom innocently imagine that whatever appears in a religious paper must be honest and altogether trustworthy. The editors of many of these "religious" journals cannot claim release of responsibility on the grounds of ignorance. We know that in several instances some of the most honoured members of our profession have seriously sought to abate this scandal, but hitherto, we fear, with but little success. It seems incomprehensible that "religious" papers should for the sake of financial gain stoop to accept such advertisements as a high-class "lay" newspaper would rigorously exclude. Unless those responsible for the conduct of these "religious" papers can speedily make up their minds to clear their columns of such filthy and dishonourable advertisements as now find place in them we venture to think it will become a public duty to expose them to "the wicked world" as well as to "the religious public."

Alpine Accidents.

Switzerland has been well-termed the playground of Europe, but unfortunately it still proves to many a burial-ground. And much of the loss of life occurring on the mountains or glaciers is directly the outcome of ignorance or folly, the neglect of ordinary hygienic precautions, or the voluntary acceptance of unwarranted risks. Swiss guides are rightly praised for their prudence and endurance. In some districts they receive a certain amount of instruction in the principles of first aid, but generally speaking they are guides by "rule of thumb," or should we say "rule of foot"—at all events they frequently lack a knowledge of hygienic principles, and hence when calamity overtakes them the limits of their helpfulness are soon reached. The recent calamity on Mont Blanc is clear evidence of this. If the published accounts are to be taken as correct, the two young mountaineers who lost their lives, and the guide and porter who rushed headlong into disaster, had seriously lowered their powers of resistance to the low temperature to which they were exposed during the snowstorm by indulgence in alcohol. The experience of the best climbers, and the testimony of such Arctic travellers as Nansen, have clearly demonstrated the prejudicial action of alcohol when physical exertion has to be borne at low temperatures, and yet the findings of experiment and experience are constantly set aside, and only too often with disastrous results.

Ocular Fatigue and Winking.

It is generally admitted that the incandescent electric lamp affords the light least fatiguing to the eyes by reason of its constancy and mellowness, but this can only hold good in respect of quality, since the quantity of light best adapted to secure comfort varies according to the refraction of the individual as well as his sensitiveness to luminous rays. A Russian physician points out a simple method of estimating the degree of fatigue caused by particular methods of illumination, based upon a series of experiments under varying conditions. He found that a person working by candle light winked, on an average, six times a minute, while with gas light the average of winks was reduced to less than three per minute. In sunlight, presumably diffuse, the subject winked rather more than twice a minute, and with the electric light less than twice a minute. Of course, winking is only the indication and not the cause of the ocular fatigue, and it follows that winking deliberately indulged in for purposes foreign to the useful employment of the organs of vision may be indulged in with impunity, and afford no data from which physiological deductions can be drawn.

The Tuberculosis Question and Dr. Garnault.

The reception which Dr. Garnault's attempts at self-immolation on the altar of science has met with in the press of all countries is calculated to discourage others from following his example. It is perhaps as well that this should be so, especially as the problem which it is his object to decide cannot be solved by experiments conducted on the lines which he has so painfully laid down. Dr. Garnault appears to have omitted the indispensable preliminary step of proving that he was not already the victim of tuberculosis. This alone would vitiate any conclusions to be drawn from his inoculations. Then, too, the question is not so much whether it be possible by violent and altogether artificial means to transmit bovine tuberculosis to human beings as whether such transmission can take place from the ingestion or inhalation of infected material. Professor Koch treats the experiment with a scathing sarcasm which has excited the ire of the French press in general. These, however, are conditions unfavourable to dispassionate scientific research, and if the professor's postulate is to be disproved it will certainly not be by experiments carried out in such a heated atmosphere.

Adiposis Dolorosa.

An interesting case of *adiposis dolorosa*, or *Dercum's disease*, has been placed on record by Dr. E. Angus Johnson. The subject was a female, æt. 32, married thirteen years, but still a nullipara. At the time of her marriage she weighed 7st. 9lbs. "Eight years ago she noticed that her stomach was getting larger, and very tender on pressure (the pain being compared to that of a bruise). Then the hips, chest, arms, and legs got bigger. Pains of a neuralgic nature under the left shoulder, which have been worse since the influenza; also neuralgic pains on crown of head, across the forehead, and particularly over the left temporal region. There are frequent hot flushes of the face, followed by cold, clammy sensations; also giddy sensations, with a feeling as if she is going to fall backwards. Locomotion is difficult, and a very short walk is followed by great breathlessness and palpitation, her nervous equilibrium being upset over most trivial matters. When she 'catches a cold,' the pain in the chest is so severe that she cannot sleep on its account. Standing for any length of time causes severe pain in the ankles and knees (which do not swell); this also prevents sleep." The face is not affected, and on that account has the curious aspect of looking too small. The thyroid gland, so far as its outlines can be made out, appears to be unaffected. The thoracic and abdominal walls present great deposit of adipose tissue; on the latter "whilst in the recumbent position big folds of fat are produced. This is tender on manipulation or slight squeezing, the pain, as already noted, is likened to that which follows a bruise, the skin bruising on very slightly squeezing it." The temperature and heart's action appear to be normal: pulse 96. The hands and feet appear normal except for a slight fulness of the thenar, hypothenar, and plantar eminences. No muscular wasting can be detected. The headache, vertigo, palpitation, and sleeplessness are intensified at menstruation. The *tout ensemble* suggested to Professor Watson, who saw the case in consultation, the happily descriptive epithet of ambulatory lipoma.

Kahler's Disease.

IN a recent number of the *Rivista Critica di Clinica Medica* Dr. E. Donetti reports a case of "Kahler's disease," a pathological condition so rare that only sixteen cases have been reported up to the present. The characteristic symptoms of the affection are emaciation, weakness, marked anæmia, pains in the bones, with softening and fractures, and various deformities. Heteroalbumose is found in the urine in an earlier or later stage. Post-mortem examination displays the presence of sarcoma-like growths in the ribs, sternum, and bodies of the vertebræ. This first invades the marrow, and afterwards destroys the osseous tissue. Lesions of the solid viscera—kidney, liver and spleen—have also been found. It would appear that when the bone marrow is rendered unable to perform its normal physiological functions the new substance—albumose—is formed by the established pathological conditions. This causes a true intoxication, which is the immediate cause of the fatal result.

A New Surgical Departure in Neuritis.

DRS. CHIPAULT and Le Für have recently inaugurated a new advance in the treatment of a special form of intercostal neuralgia. A man, æt. 48, had for a period of four years suffered excruciating neuralgic pains in the course of the eighth, ninth, and tenth intercostal nerves of the right side and around the umbilicus. There were violent crises, which had been proving worse as the case grew older. He had been treated at various hospitals, and heavily dosed with the usual anodynes—even up to eighty centigrams of morphia *per diem*—without any permanent improvement. He had, in consequence, lapsed into a deplorable state of general health, and had frequently contemplated suicide. The crises occurred at intervals varying from a few minutes to several hours. There was also a zone of hyperalgesia corresponding to the distribution of the nerves mentioned. There was no evidence of tabes: the reflexes were rather exaggerated, and there were none of the usual vesical or rectal complication of tabes. The diagnosis arrived at was a "névrite radiculaire"—a neuritis of the roots of the nerves in question, at their origin from the spinal medulla. Accordingly, an incision was made vertically over the sixth and seventh dorsal spinous processes, which had been found by previous experiments on the cadaver to correspond to the level of the origin of the roots of the nerves in question. This was prolonged till room was made for the removal of three of the posterior vertebral arches. The dura mater was then incised; the three nerve roots sought for were fully exposed, and found to emerge from a well-defined and sharply localised area of cicatricial arachnitis. The affected arachnoid was removed, the diseased nerve-roots excised, the dura mater sutured, and the wounded soft parts brought together *secundum artem*. The patient left the hospital thirty-five days after the operation, free from pain. There have been some recurrences of the neuralgic crises since, but not nearly so frequent or so intense as before the operation. The success, although not perfect, has certainly been a very remarkable one; and Drs. Chipault and Le Für may well be congratulated on having inaugurated a new and brilliant departure in the domain of surgery.

Intestinal Occlusion.

AT a recent meeting of the Surgical Society of Paris M. Rochaud reported two cases of intestinal occlusion due to biliary calculi. The first case was that of a woman seventy-nine years old, who was admitted on the seventh day of her illness. The case was considered to be a neoplasm, and a laparotomy performed, when a large calculus was found in one of the loops of the small intestine. A simple incision liberated the calculus and the patient made a quick recovery. The second was analogous to the former. An aged woman was admitted to hospital three days after her sickness began. A laparotomy was performed, and a large calculus was removed from a loop of the small intestine, which, however, had become adherent to the brim of the pelvis. Thirty-six hours after the operation the patient died of general peritonitis. Such cases are very obscure, and the diagnosis can seldom be made until a laparotomy allows of the sense of sight as well as touch. The result as a rule, depends on the condition of the peritoneum at the time of operation.

Pneumonia in Children.

ONE of the many difficulties that beset the young medical practitioner in the beginning of his career is the diagnosis of the diseases of children. He has commenced with a clear perception of the physical signs of pneumonia in the adult and too often he has not had the opportunity of studying this common disease in the child. Besides the patience with which an hospital patient submits to examination is not to be found or expected in a child. Without frightening or disturbing the little patient the lack of expansion of the subclavicular region of the side affected is easily recognised by placing the finger-tips of each hand on the infra-clavicular region. The sign is a valuable one, and easy of recognition.

THE International Congress on the Care of the Insane will take place at Antwerp on September 1st.

THE Congress of German Scientists and Physicians meets at Carlsbad on September 21st.

Nurse Beattie Again.

Nurse Beattie, she who attained a measure of notoriety in consequence of her persistent attacks on Dr. Cullingworth for having, as she alleged, operated not wisely but too well, has made another appearance as plaintiff, this time at the West London Police Court. She poured into the magistrate's sympathetic ear a tale of woe, alleging that she had been boycotted at all the London hospitals in that, although an operation had been declared to be necessary, she could nowhere find admission with that object in view. Really Nurse Beattie is unreasonable! Can she humanly expect any surgeon who values his peace of mind to incur the risk of the worry and expense to which she deliberately subjected the philanthropic surgeon who gratuitously placed his skill at her disposal on a previous occasion? One surgeon in her opinion operated too much, and the others not enough. The magistrate opined that if proper representations were made means would be found to secure her admission, but he overlooked the fact that though one man can lead a horse to the water twenty cannot make him drink. In deciding on an operation all the circumstances of a case must be taken into consideration, and there is one circumstance in this case which would indispose any prudent surgeon to assume the responsibility of undertaking it.

The seventy-fourth annual meeting of the Congress of German Scientists and Physicians will be held at Carlsbad from September 21st to 27th.

The annual meeting of the British Association will take place this autumn at Belfast.

PERSONAL.

Dr. Harrison, of Keynsham, sustained a compound fracture of the left arm a few days since while playing in a cricket match at Kingswood.

Surgeon General J. A. Clery, C.B., Army Medical Staff, just promoted to that rank, has been appointed Principal Medical Officer of the Transvaal and Orange River Colony.

Mr. E. Hurry Fenwick will preside at the annual dinner of the London Hospital Medical College, which will be held in the College Library on Wednesday, October 1st.

Dr. Rina Mastio has been appointed Professor of Anatomy at the University of Milan, the first occasion on which a woman has been nominated to a chair at an Italian university.

Colonel R. M. O'Reilly has been nominated to succeed to the post of Surgeon-General of the United States Army, which becomes vacant in September next by the resignation of General Forwood.

Mr. F. H. May has been appointed rector of the Hong Kong College of Medicine for Chinese, in succession to the Hon. J. H. Stewart Lockhart, C.M.G., who was recently appointed High Commissioner of Wei-hai-Wei.

Dr. Benjamin Moore, Lecturer on Physiology in the Charing Cross Hospital Medical School, has been elected by the Council of University College, Liverpool, to the Chair of Bio-Chemistry, recently founded by Mr. William Johnston.

Sir Frederick Treves has accepted the invitation of the Liverpool Royal Infirmary to open two new operating theatres at that institution. His visit was fixed for October 11th, but as that is the date for presenting the freedom of the city to Earl Roberts and Viscount Kitchener he will probably pay the visit on Friday, October 10th, or Monday, October 13th.

As the result of an international competition arranged by the *Journal of Tropical Medicine*, Dr. Attilio Caccini, of Rome, has been awarded the Sivewright prize of £10, and Dr. Bruno Galli-Valerio, University of Lausanne, Switzerland, the Belilios prize of a similar sum, for essays on subjects connected with tropical diseases. The Lady Macgregor prize was not awarded.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

SCOTLAND.

[FROM OUR OWN CORRESPONDENT.]

Carnegie Trust and the Scotch Universities.

From time to time notice has been taken in this column of the appeals made by the four Universities to the Carnegie trustees for grants in aid of their more pressing needs. The trustees have now considered these statements, and have drawn up a scheme for the distribution over five years of £200,000 among the four Universities. The annual income at their disposal for purposes of endowment (as opposed to the Fee fund) is probably not less than £50,000, so that meanwhile the trustees do not propose to ear-mark the whole of their resources. In his report to the Committee of the Trust of his visit to the Universities, Lord Elgin (the Chairman) states that he had thought it right to draw the attention of the respective Courts to two points. The first of these was the retention in the hands of the Executive Committee of the administration of any funds for the encouragement of post-graduate research. The second was the difficulty which would attend any extensive permanent devolution of the income of the Trust. He regards it as perfectly natural that there should be an anxiety to relieve the respective University funds, especially where, as in Aberdeen, that fund is weak, from the pressure of charges, notably those to lecturers and assistants, and to make some addition to quite inadequate salaries, and he admitted that immediate relief could not be obtained if the grants must all be used as grants towards capital funds or endowments. But he holds it essential to maintain this general principle, though limited sums may be voted in relief of deficiencies of income. Lord Elgin's conclusions on these two points were approved by the Committee, and the grants now announced follow on them. In connection with the second point, what is desired by the Trustees may be illustrated by the proposal for the better teaching of modern languages at Aberdeen. An annual sum of £2,500 is set aside, which is divided into two portions, the larger one (£2,000) being allowed to accumulate for five years for the purposes of endowment, the smaller one (£500) being placed provisionally at the disposal of the University Court to meet current expenses. If this scheme is adopted, the result will be to relieve the University Fund of the whole or nearly the whole of the charges presently thrown upon it (for this particular object), and at the end of five years to place it in possession of an endowment yielding £300 a year. The system is an attempt to combine the relief of present necessities with the provision of secured and permanent endowments. The trustees hope that the latter part of the scheme, which contributes to University endowment, may tend to accelerate its own progress. There are persons willing to assist in the earlier realisation of an object if a clear and strong lead is given. It is by no means necessary that the endowment funds so created should be used for the institution of new professorships or lectureships, but existing lectureships may instead be placed on a permanent footing, or raised to the position of professorships. Schemes for the proper endowment of assistantships may also be considered, for undoubtedly there is much to be said for making the departments already existing in the Universities thoroughly efficient before proceeding to endow new ones. At present the trustees have made no statement as to how they propose to endow research, beyond the fact that they propose to retain the administration of any funds for that object in their own hands. They have not thought it expedient to go beyond the questions raised by the statements of the University Courts, which have been specially remitted to them. But they cannot shut their eyes to the fact that the operations of the Committee may more or less seriously affect the interests of some of the extra-mural Colleges and institutions which have also claims under the trust deed. It is enough to say at present that these cannot be wholly ignored, and that therefore funds must be kept in hand to meet possible expenditure during the period of the grants now proposed. The present report, therefore, deals solely with the disposal of about four-fifths of the income in the hands of the trustees for a period of five years for the better equipment of the Universities, and leaves over meantime the question of original research and the treatment of educational bodies other than the Universities. Of the money now allocated Glasgow gets £11,000 annually, Aberdeen £9,000, St. Andrews £8,500, and Edinburgh £11,500. In each case the sum allotted is to be devoted to (1) buildings and permanent equipment, (2) teaching, and (3) library. For the last-named object all the Universities are treated alike, receiving £1,000 per annum, or £5,000 in all. Glasgow gets £40,000 for providing accommodation for physics, physiology, materia medica, and forensic medicine, and the equipment of the chairs of chemistry and geology if there is any remainder. £10,000 is set apart for the endowment of teaching, of which £7,500 is to go to the chair of geology. In Aberdeen the bulk of the grant is devoted to teaching, a sum of £5,000 being set aside for buildings, and £35,000 for the former object. The greater part of this grant is to be devoted to the endowment of a chair of history, and the remainder to modern languages. In each instance £500 a year is to be used as provisional assistance for income of the chairs, the remainder to be allowed to accumulate. St. Andrews gets £15,000 towards building, disposed of as follows:—Chemistry £5,000, including endowment for upkeep: physics £2,000; extensions in Dundee £8,000. It also gets £22,500 for teaching, £10,000 for general purposes and £12,500 for modern languages. Here again a part of the grant is to be applied to income, and the bulk allowed to accumulate for five years. Edinburgh University has £40,000 allotted to it for buildings and permanent equipment in natural philosophy and engineering, alterations in library, apparatus, pathological bacteriology, and catalogue of anatomical museum. £12,500 is to be devoted to teaching—for endowment of modern languages or some other approved purpose. One cannot but feel that the Committee of the Trust have dealt with their responsible task in a wise and statesmanlike fashion, and if their dealings with the extra mural schools and colleges, and their treatment of the question of aid to original research are characterised (as there is no doubt they will be) by the same spirit of justice and farsightedness, they, no less than Mr. Carnegie, will deserve the thanks of all who are interested in higher and technical education in Scotland.

A widespread epidemic of cholera is raging in the north of China.

BELFAST.

[From our own Correspondent.]

I have alluded in this column on former occasions to the inquiry held by the Irish Local Government Board in reference to the alleged excessive expenditure on medicines and appliances at the Belfast Union Workhouse.

At a recent meeting of the board of guardians a letter was read from the Local Government Board directing the guardians to convene a meeting with a view to determine whether the medicine contractors should any longer be entrusted with the contract for supplying medicines to the workhouse. The letter also advises the guardians to impress upon their medical officers that the proper discharge of their duties involves not only skilful treatment of the sick under their charge, but also the due exercise of economy in requisitioning the articles required for their patients. In addition, it is to be expected that medical officers shall possess ordinary administrative capacity and a sense of responsibility in seeing that articles obtained under their signature are really necessary and are applied to the purposes for which they are ordered. The want of control over the nurses and their wasteful extravagance point, it is further stated, to lax discipline in the nursing staff which, having regard to the fact that the Belfast Workhouse Infirmary has become a large and important school for training, may, if not checked, have far-reaching evil effects. The Local Government Board requests the guardians to endeavour to provide for the proper supervision, education, and control of the nurses. As a result of the inquiry the Local Government Board concurs with the view of its inspector, Dr. Smyth, that the sum of £427 11s. was excessive, and it has accordingly disallowed recoupment from the Local Taxation (Ireland) account upon this sum. The reports of the medical inspector are to be carefully considered at a special meeting of the guardians.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

THE NOMENCLATURE OF SURGICAL OPERATIONS FOR UTERINE TUMOURS.

To the Editor of The Medical Press and Circular.

Sir,—I would like to take advantage of the reports of Dr. Giles' two cases in The Medical Press and Circular of July 16th and 23rd of tumour of the uterus, and refer once more to the nomenclature of the subject.

I am sure, on further consideration, Dr. Giles will agree with me that the names he proposes are far from being the best that could be used. He proposes three terms:—

1. Abdominal myomectomy is reserved for cases in which a subperitoneal pedunculated myoma is removed from the uterus.

2. Abdominal enucleation for cases in which a myoma is shelled out of the substance of the uterine walls.

3. Abdominal hysterectomy for cases in which the uterine cavity is opened and a tumour removed from its interior; these are all to be considered consecutive operations.

Now, may I venture to say that he would be a very indiscreet man, to say nothing more, who could even consider, in No. 1, where the tumour is entirely subperitoneal and pedunculated, anything else than merely removal of the tumour alone. There is no occasion for considering the uterus any more than any other internal organ. All sorts of tumours appear intra-abdominally, and the term, therefore, of myomectomy, as applied to uterine tumours is not only not sufficient, but misleading. The ordinary terms of general surgery should be used here, such as excision of so and so.

2. Abdominal enucleation is a still more unsuitable phrase. If it means anything it means enucleation of the abdomen—and that would never do.

3. Abdominal hysterotomy is, if possible, still worse. Taken at its best, it may be understood to mean cutting into the uterus, only this and nothing more.

If Dr. Giles would kindly refer to the very inefficient report given in the *British Medical Journal* of the paper I read at the Association meeting in 1894, he would there see that all that he refers to has been put down fairly and clearly by me, going perhaps even a little further than he may have gone yet, since I record several illustrative cases, and among them one where even with the fragments of a uterus after resection subsequent successful pregnancy and delivery occurred.

In this paper I suggested the use of a plain ordinary word, which by long use has come to be perfectly understood in general surgery, and I have no doubt its adoption into gynæcological practice would help to remove one of the barbarous innovations of special names in this branch as if it were not truly a branch of general surgery.

The word is "resection." It requires no explanation. Everybody understands resection—of bones, joints, muscles, nerves—in general surgery; a cutting or separating for the purpose of removing some diseased part, and then putting the separated parts together again, a truly conservative operation by name even. The word is simple, accurate and fits all kinds of cutting into the uterus for the removal of anything. It does not restrict one to a fibroma, a myoma, papilloma, or anything. It merely describes the operation and that is all that is wanted. The thing removed requires a separate description. If only Dr. Giles would lend his valuable aid with others like him in important public positions to adopt the simplest surgical names gynæcology would soon cease to stand by its nomenclature as something in its surgical aspect different from all other surgery.

I am, Sir, yours truly,
J. Stuart Nairne, F.R.C.S.
Glasgow, August, 1902.

GARLIC OIL AND PHTHISIS.

To the Editor of The Medical Press and Circular.

Sir,—It is doubtless to the sulphur, as sulphide of allyl contained in the essential oil of garlic, that the therapeutic effects of this oil are due. Your correspondent, Dr. Vivian Poore, in his work, page 278 (*a*), reminds his readers that many sulphides have been found of service in tuberculous diseases.

The sulphide that I have myself found of service, among others, has been the bisulphide of carbon of the British Pharmacopœia. Two drachms of the pure bisulphide may be dissolved in six drachms of rectified spirit, and four or five drops given in milk or in emulsion three times daily.

In chronic phthisis of cold and strumous temperaments I have found it useful; also in asthma and chronic bronchitis. That the sulphide is eliminated by the respiration is evident from the abominable odour it gives to the breath, and this is the great objection patients make to its use.

Externally, I have used the bisulphide in the proportion of one part to three of almond oil, and am able to speak well of it as a very useful application over any part of the chest where we suspect a deposit or thickening to exist.

One of the ward sisters in Victoria Park Chest Hospital gave the liniment the appropriate name of "onion oil," and this name took well with the patients.

The onion smell of the oil naturally forms an objection to its use with many patients. This unpleasantness was overcome in a preparation made for me by Mr. Frank Rogers, chemist, of Oxford Street, where the bisulphide oil was so happily blended with the oils of lavender, lemon, and geranium that the liniment became quite an elegant compound without loss of efficacy as a curative agent.

I am, Sir yours truly,
John C. Thorowgood, M.D., L.R.C.P.
Bognor, August, 1902.

Literature.

INTERNATIONAL CLINICS. (*a*)

Each series of the "International Clinics" consists of four volumes, one of which is issued in April, July, October and January. The volume contains 300 pages, royal 8vo, and is complete in itself. The present volume contains a biographical sketch of Dr. Weir Mitchell, who in his "Hugh Wynne" tells the story of Arnold and of that true heart and brave soldier Andre; and a biography of Dr. John Wyeth, whose story of Nathan Radford Forrest is a brilliant record of that great general's campaigns. We also get the story of President McKinley's death, and we learn why the bullet was not found, neither at the operation or at the autopsy.

The medical papers in the number cover the whole field of medicine; they are not numerous, but they are helpful and suggestive, the work of writers who bring from the treasury of their knowledge things new and old, one and all throwing light on obscure points in practice. The practical character of the papers may be learned from such titles as "The Use of Opium," "Habitual Constipation," "Thyroid Poisoning," "The Treatment of Acne." We may just add that the book is beautifully illustrated by some thirty-two plates, and contains about an equal number of illustrations.

Medical News.

York Lunatic's Death.

A coroner's inquest has been opened into the circumstances attending the death of an inmate of Bootham Asylum, York. The deceased, a man, aged 35 years, fell into the hands of the police on June 27th, owing to violent conduct in a hotel. He was removed to the workhouse, and on the following morning was brought before the court and afterwards committed to the asylum. It appears he was very violent while at the police station, that a considerable amount of force was required to restrain him, and that he made no complaint of wound or injury. Dr. Grove, assistant medical officer, deposed that deceased, who suffered from acute mania, was very violent when admitted to the asylum, and that it was impossible for him to perform the usual physical examination. He noticed, however, that he had a black eye and a large lump on the right side of his head. When he examined him on July 6th he found his back reddened, especially on the upper and lower parts, numerous external abrasions, and evidence of fracture of ribs. Up to that date he required two attendants, and on certain days had to be confined in the padded room. On July 15th he was informed that deceased had lost three teeth, and on examination found three teeth missing from the front lower jaw. Six days later he was breathing heavily, and gradually sank next day. Mr. Reynolds, police surgeon, who certified him to be insane on June 28th, stated he made no physical examination. He made a post-mortem examination of his body, and in addition to external injuries found twelve fractured ribs, the ragged ends of which had penetrated the pleura, and empyema had set in. The lining membrane of the heart was inflamed, the kidneys and liver affected, and the brain showed meningitis. Death, in his opinion, was due to exhaustion from the injuries and combination of the causes named. Roughly speaking, he thought the injuries were about a fortnight old. The evidence is not very enlightening, but we are glad the matter will be thoroughly sifted by the reigning authorities. It is a regrettable fact that insane persons are regularly removed to asylums without being medically examined physically, with the result that many are sent to an asylum merely to die. Not only does this mean needless public expense but it increases the death-rate of our asylums, and detracts

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(*a*) Poore on "Nervous Affections of the Hand and other Studies." London: Smith, Elder and Co.

(*a*) "International Clinics: a Quarterly Journal of Illustrated Clinical Lectures, and especially Prepared Articles." Edited by Henry W. Cattell, A.M., M.D., Phil., Penn. Volume I. Twelfth Series. Philadelphia and London: J. B. Lippincott and Co. 1902.

from the value of their statistics. This certainly should not be, and death, in many cases, is doubtless hastened by removal. We think it is most important, and the case in question confirms our opinion, for a physician who is called upon to certify a person to be of unsound mind, to make a thorough physical, as well as mental, examination before doing so, and satisfy himself that the person is in a fit state to be removed to an asylum. Allowance must be made, however, in the case before us for the man's violent condition, but at the same time it is a matter for regret that the asylum officials did not carry out a more thorough physical examination when he was admitted, and even more so that the police surgeon made no physical examination at all. The inquiry has been adjourned, and we shall watch with much interest its ultimate result.

The Royal College of Surgeons in Ireland and the Coronation.

The Royal College of Surgeons in Ireland have presented the following address to the King:—

To His Most Excellent Majesty Edward the Seventh of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, King, Defender of the Faith, and Emperor of India.

May it please your Gracious Majesty,—We, the President, Vice-President, and Council of the Royal College of Surgeons in Ireland, beg most respectfully to offer our loyal and cordial congratulations on the auspicious occasion of the Coronation of your Majesty and of Queen Alexandra as King and Queen of Great Britain and Ireland and of the Dominions beyond the Sea. We feel pride in being the subjects of a Sovereign who has ever been foremost in all works of charity and mercy for promoting the comfort and alleviating the suffering of humanity not only as exemplified by the life-long interest taken in hospital extension and efficiency, but also as instanced by such movements as the housing of the working classes, the Tuberculosis Congress and the Cancer Commission. We rejoice that the happy event of the Coronation should have an additional splendour conferred upon it by the declaration of peace in South Africa and the permanent extension of the Empire. We trust the time is not far distant when your Majesties will visit this country as Ireland's King and Queen, and we venture to express our confidence that in no part of the realm would there be a deeper feeling of gratification and welcome. As a Royal College of Surgeons we have for over a century been responsible for the training and education of a large number of surgeons who have served, not without distinction, in your Majesty's Navy and Army. We beg to assure your Majesty of our determination to maintain the loyal and dutiful relations with our Sovereign which has always characterised the Royal College of Surgeons in Ireland. We rejoice that your Majesty has recovered from your recent serious illness.—Signed on behalf of the Council,

Lambert H. Ormsby, President.
Arthur Chance, Vice-President.
Charles A. Cameron, Secretary.

Small-pox in London.

The steady decrease in the number of fresh admissions has been maintained during the past week, and the number of patients under treatment in the hospitals of the Metropolitan Asylums Board is now under two hundred.

The Ventilation of Yachts.

The question of adequate ventilation is one often overlooked by designers of yachts, in spite of the fact that any shortcoming in this respect necessarily detracts in great measure from the benefit to health associated with this delightful pastime. In the German Emperor's new racing yacht the circulation of air between decks has been secured by means of the well-known "Boyle" system of ventilation, which acts independently of variations of atmospheric temperature, and is not affected by rough weather. Being quite automatic it is not liable to get out of order, and on this account the method is gradually finding its way into use in the Navy and in the ships of the large ocean companies. In troop ships especially the need for efficient ventilation has made itself felt, and excellent results have followed the introduction of the "Boyle" system.

The Case of Dr. W. T. Law.

A meeting of friends and sympathisers will be held at the Holborn Restaurant, W.C., on Friday afternoon, August 29th. The chair will be taken at 5 p.m. by Sir William Selby Church, Bart., M.D., President of the Royal College of Physicians of London, when the presentation will be made to Dr. W. T. Law. In the meantime the fund will remain open for the reception of any further contributions. Cheques and postal orders should be made payable to the Law Fund, and crossed London and County Bank, Holborn, W.C., and sent to Dr. Paramore, 2, Gordon Square, W.C., who will gladly acknowledge the receipt of all donations, however small.

The Welsh Hospital in South Africa.

A suitable memorial to the memory of those who died in connection with the Welsh Hospital in South Africa has been placed in St. David's Cathedral at Milford. It reads as follows:—"The Welsh Hospital in South Africa. This tablet was placed in this Cathedral Church by the Committee of the Welsh Hospital in South Africa in memory of those members of the medical and nursing staff of the hospital who died for their country in the Boer war in the years 1900 and 1901—Professor William Hughes, M.B., F.R.C.S., Professor Thomas Jones, M.B., F.R.C.S., Herbert Davies, M.B., Thomas Richard Eames, Dresser; Marion Lloyd, Royal Red Cross Matron; Florence Louise Sage, Nursing-Sister. Gorphwysant."

Dublin Death-rate.

The deaths registered in the Dublin registration area for the week ending Saturday, August 9th, 1902, represent an annual rate of mortality of 21·2 in every 1,000 of the population; 65 infants died during the week, of whom 31 were under one year old; 18 deaths were caused by diseases of the circulatory system; 28 from diseases of the respiratory system; 28 deaths by measles; and 13 from diseases of the nervous system. In the Blackhall Place district, the Castle Street district, Grand Canal Street district, and Palmerston the death-rates were 32·9, 24·4, 24·6, and 26·9 respectively.

King Edward's Hospital Fund.

By the direction of the Prince of Wales a cheque for £460 has been forwarded to King Edward's Hospital Fund for London. This amount represents the net profit of the exhibition at the Imperial Institute of Colonial gifts and addresses received by the Prince and Princess of Wales during their recent tour.

The Late Dr. Pepper.

The remains of Dr. W. H. Pepper, of Birmingham, who met his death whilst on a yachting cruise on the Norfolk Broads, have been quietly interred at Acle, the scene of the sad disaster.

Pass Lists.

Society of Apothecaries of London.

The following candidates have passed in:—

Surgery.—W. Ball (Section II.), S. Bentley (Sections I. and II.), A. E. Henton (Sections I. and II.), G. A. Jones (Sections I. and II.), J. D. Keir (Sections I. and II.), D. E. Lockwood (Section II.), A. R. McEnnery (Sections I. and II.).

Medicine.—W. Ball (Section II.), I. Griffith (Section I.), A. T. Harvey, A. R. McEnnery (Sections I. and II.), E. H. Noney (Sections I. and II.), C. H. Osmond (Section II.), C. M. Woods (Section II.).

Forensic Medicine.—W. C. P. Bremner, A. R. McEnnery, E. H. Noney, H. F. B. Roberts, F. C. Whitmore.

Midwifery.—W. Ball, G. J. Humphreys, A. R. McEnnery, J. P. Nettell, E. H. Noney, S. Northwood, H. F. B. Roberts.

The diploma of the Society was granted to the following, entitling them to practise medicine, surgery, and midwifery:—W. Ball, G. A. Jones, D. E. Lockwood, A. R. McEnnery, H. F. B. Roberts, and C. M. Woods.

Notices to Correspondents, Short Letters, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

SPOTTED FEVER.

Montana.—The disease popularly known as "spotted fever" is probably enanthematous typhus, but, as the name implies, the diagnosis is made by inexperienced persons, and may cover measles, or, indeed, any febrile eruptive affections.

Status.—It is stated that 75 per cent. of female inmates of prisons, a large proportion of whom are under twenty years of age, are of intemperate habits, and the effect of a term of imprisonment in no way prevents them resuming their habits when liberated. This fact does not prove much in the absence of any aural training during the period of reclusion, and reform cannot be expected unless these prisoners, on liberation, are taken in hand and provided with employment.

A MEDICAL HIVE.

A large office building in Chicago, says the N. Y. *Medical Record*, is occupied in its entirety by medical men and dentists, there being no less than 222 physicians and thirty-six dentists under the one roof. This well-nigh represents the Cavendish Square district under one roof.

C. O. A.—It was Trousseau who directed attention to the significance of unilateral deafness in association with typhoid fever—when bilateral he considered the prognosis to be favourable. His observations on this point do not appear to have been confirmed by independent clinical research, and in any case affections of the ear are really very exceptional in this connection.

Verax.—The expression to which you take exception was a quotation, and in no way represents the view taken by the Editor. The omission of inverted commas explains the mistake, although the context makes matters quite clear.

DISTRIBUTION OF PHYSICIANS.

Statistics recently published show that the town containing relatively the largest number of physicians in the United Kingdom is Clifton, with 36·8 per 10,000 of population; Dublin has 13·8, Glasgow 12·8, London 12, Sheffield 5.

Appointments.

Finn, P. T., L.R.C.P.Edin., L.R C.S.Edin., L.F.P.S.Glasg., Certifying Surgeon under the Factory Act for the Ashwick District of Somersetshire.

Harding, Norman E., M.B., Ch.B.Edin., Second House Surgeon to the East Suffolk and Ipswich Hospital.

Harvey, Alfred, M.B.Lond., M.R.C.S., L.S.A., Medical Officer to the Southmead Workhouse by the Barton Regis Board of Guardians.

Hoole, John, M.R.C.S.Eng., L.S.A.Lond., Medical Officer and Public Vaccinator to the Hartington District of the Ashbourne Union.

Jenkins, George Harrison, L.R.C.P., L.R.C.S.Edin., L F.P.S. Glasg., Medical Officerof Health for the Usk (Mon.) District Council.

Johnson, Henry Sandford, M.R.C.P.Irel., L.F.P.S.Glasg., Medical Officer of Health for the Ashburton (Devon) District Council.

Lapage, C. P., M.B., Ch.B., House Surgeon to the Manchester Royal Infirmary.

Macmillan, J. I., M.B., M.S.Glasg., Certifying Surgeon under the Factory Act for the Laurencekirk District.

Paton, Leslie, B.A., M.B., B.C.Camb., F.R.C.S.Eng., Assistant Ophthalmic Surgeon to St. Mary's Hospital, Paddington.

Sadler, E. A., M.D.Lond., Medical Officer of Health to the Ashbourne District Council.

Stewart, J. H., M.B., B.Sc., R.U.I, Certifying Surgeon under the Factory Act for the Cruden District of Aberdeenshire.

Sweeny, W. J., M.B., B.Ch., B.A.O., R.U.I., Deputy Medical Officer for the Thornbury District and Workhouse.

Vacancies.

Birmingham General Dispensary.—Resident Surgeon. Salary £150 per annum and furnished rooms, fire, lights, and attendance. Applications to Ernest W. Forrest, Secretary.

Cancer Hospital, London.—Pathologist. Salary £250 per annum. Applications to the Secretary at the Hospital, Fulham Road, S.W.

City (Fever) Hospital, Aberdeen.—Resident Physician. Salary £100, with board and rooms. Applications to the Medical Officer of Health, City Buildings, Aberdeen.

City of Liverpool Infectious Diseases Hospital.—Assistant Resident Medical Officer. Salary of £120 per annum, with board, washing, and lodging at the Hospital. Applications to the Chairman.

Cornwall County Asylum, Bodmin.—Junior Assistant Medical Officer. Salary £130, with board, furnished apartments, laundry, &c. Applications immediately to the Medical Superintendent.

County of Lanark.—District of the Middle Ward.—Resident Physician. Salary £140 per annum with board, &c. Applications to J. B. Ferguson, District Clerk, District Offices, Hamilton.

Denbighshire Infirmary, Denbigh.—House Surgeon. Salary £100 to commence, with board, residence, and washing. Applications to Secretary.

Jenner Institute of Preventive Medicine.—Assistant Bacteriologist. Salary £200, with furnished rooms. Applications to the Secretary, Jenner Institute, Chelsea Gardens, S.W.

Nottingham General Dispensary.—Assistant Resident Surgeon. Salary £160 per annum. Furnished apartments, attendance, light, and fuel are provided. Applications to Secretary, Mr. J. Preston, Journal Chambers, Nottingham.

Parish of Birmingham.—Workhouse Infirmary.—Assistant Resident Medical Officer. Salary £100 per annum, with furnished apartments, rations, coal, gas, laundry, and attendance. Applications to Walter Bowen, Clerk to the Guardians, Parish Offices, Edmund Street.

Roxburgh District Asylum, Melrose, N.B.—Assistant Medical Officer. Salary £120 per annum, with board, rooms, and washing. Applications to the Medical Superintendent.

St. Giles, Camberwell.—Assistant Medical Officer. Salary £120 per annum, with furnished apartments outside the Workhouse, and an allowance of £1 1s. weekly in lieu of board and washing. Applications to Charles S. Stevens. Clerk to the Guardians, Guardians' Offices, 29, Peckham Road, S.E.

Tadcaster, Goole, Riccall, and Selby Rural Districts, and Selby Urban District.—Medical Officer of Health. Salary £120 per annum. Applications to E. Townend, Clerk to the Joint Committee, 1, Abbey Place, Selby.

Urlingford Dispensary District and Workhouse Hospital.—Temporary Medical Officer. Salary £3 3s. per week for the former, and £1 1s. per week for the latter office. Immediate application to M. P. Dowling, Clerk of Union. (See Advt.)

Weston-super-Mare Hospital and Dispensary.—Medical Officer. Salary £100 per annum, with board, lodging, and washing. Applications to the Honorary Secretary.

Birth.

Snell.—On Aug 16th, at Glenshee Lodge, Wandsworth Common, S.W., the wife of Sidney H. Snell, M.D.Lond., of a son.

Marriage.

Phillips-Jenkin.—On Aug. 14th, at Landewednack Church, the Lizard. Cornwall, Harry Harding Phillips, M.R.C.S.Eng., L.R.C.P.Lond., of Hamilton House, Penge, to Frances Mary, third daughter of Pearse Jenkin, of Trewirgie, Redruth, and Tregullus House, the Lizard.

Deaths.

Gasquet.—On Aug. 13th, at No. 1, College Gate, Brighton, Joseph Raymond Gasquet, M.D., aged 64 years.

Tuxford.—On Aug. 14th, at 51, High Street, Boston, James Edward Tuxford, M.R.C.S., L.R.C.P., &c., of pneumonia, after a few days' illness.

Wyman.—On Aug. 16th, at Red Brae, Putney Hill, S.W., William Sanderson Wyman, M.D., F.R.C.S., L.S.A., in his 71st year.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—St. George's, 2 p.m.—St. Mary's, 2.30 p.m.—Middlesex, 1.30 p.m.—Westminster, 2 p.m.—Chelsea, 2 p.m.—Samaritan (Gynæcological, by Physicians), 2 p.m.—Soho Square, 2 p.m.—Royal Orthopædic, 2 p.m.—City Orthopædic, 4 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a m.—Royal Free, 2 p.m

TUESDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex, 1.30 p.m.—Westminster, 2 p.m.—West London, 2.30 p.m.—University College, 2 p.m.—St. George's, 1 p.m.—St. Mary's, 1 p.m.—St. Mark's, 2.30 p.m.—Cancer, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Royal Ear, 3 p.m.—Samaritan 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—Soho Square, 2 p.m.

WEDNESDAYS.—St. Bartholomew's, 1.30 p.m.—University College, 2 p.m.—Royal Free, 2 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. Thomas's, 2 p.m.—London, 2 p.m.—King's College, 2 p.m.—St. George's, (Ophthalmic) 1 p.m.—St. Mary's, 2 p.m.—National Orthopædic, 10 a.m.—St. Peter's, 2 p.m.—Samaritan, 9.30 a.m. and 2 30 p.m.—Gt. Ormond St., 9.30 a.m.—Gt. Northern Central, 2.30 p.m.—Westminster, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Cancer, 2 p.m.—Throat (Golden Square) 9.30 p.m.

THURSDAYS.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—University College, 2 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—London, 2 p.m.—King's College, 2 p.m.—Middlesex, 1.30 p.m.—St. Mary's, 2.30 p.m.—Soho Square, 2 p.m.—North-West London, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central (Gynæcological), 2.30 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—St. Mark's, 2 p m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square) 9.30 a.m.

FRIDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—King's College, 2 p.m.—St. Mary's, 2 p.m.—Ophthalmic, 10 a.m.—Cancer, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—City Orthopædic, 2.30 p.m.—Soho Square, 2 p.m.

SATURDAYS.—Royal Free, 9 a.m.—London, 2 p.m.—Middlesex, 1.30 p.m.—St. Thomas's, 2 p.m.—University College, 9.15 a.m.—Charing Cross, 2 p.m.—St. George's, 1 p.m.—St. Mary's 10 p.m.—Throat (Golden Square), 9.30 a.m.

At the Royal Eye Hospital (2 p.m.), the Royal London Ophthalmic (10 a.m.), the Royal Westminster Ophthalmic (1.30 p.m.) and the Central London Ophthalmic Hospitals operations are performed daily.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, AUGUST 27, 1902. No. 9.

Original Communications.

CHRONIC PROGRESSIVE DEAFNESS. (*a*)

By MAYO COLLIER, M.S.LOND., F.R.C.S.ENG.,
Senior Surgeon to the North-West London Hospital, Ex-President of the British Laryngological, Rhinological, and Otological Association, &c.

THE affection I propose to deal with more particularly in this communication is the form of deafness that occurs quite insidiously without warning, without pain or previous discomfort of any kind, and only becomes apparent to the individual when a marked impairment of hearing has taken place.

I propose to call this form of deafness, in contradistinction to cases of deafness secondary to ear diseases, "chronic progressive deafness."

The terms chronic middle ear disease, chronic middle ear catarrh, chronic non-suppurative disease of the middle ear, chronic sclerosis, include certain conditions, the result of previous catarrh, suppuration, congestion, injury or other morbid states in and about the middle ear.

It is a matter of common knowledge that a very large number of the inhabitants of this country, America, and other temperate and moist regions, are afflicted with a form of painless, slowly increasing deafness, for which at present, as far as I am able to state, no adequate reason, cause or explanation has been forthcoming by those whose special duty it is to make a study of this subject. For this slow, gradual, painless, chronic form of deafness I propose to assign the adjectives "chronic" and "progressive."

I am chiefly concerned to-day in endeavouring to more clearly define the cause of this slow, chronic, progressive form of deafness. It is only by finding out the causes of diseases that we are in a position to prevent or formulate the most suitable and appropriate treatment with a view to cure them. In the words of Bacon—"Vere scire est per causas scire."

Now, Sir, one naturally turns first to the works and writings of one's own countrymen for instruction, information and advice on most subjects. But I must candidly confess that on the subject of the ætiology of chronic progressive deafness, or indeed the larger and more comprehensive class of disease known as chronic sclerosis, little or no assistance can be obtained from the writings of one's own countrymen. Most of the text-books are singularly silent on this subject, and those that are not silent are not instructive.

If we turn to the writings of our American *confrères* we find them singularly rich with thoughts and suggestions on this very subject.

In a paper dealing more or less with this subject, published in the "Transactions of the Meeting of the British Medical Association at Cheltenham" last year, I ventured to quote some statistics collected and got together by Dr. Sam Seaton, of New York.

Burnett's "System of Diseases of the Throat, Nose, and Ear" may be unknown to some of us present, but at one time it was the foremost work on the subject, and was written and collated by the foremost men of the period.

Dr. Sam Seaton, of New York, was one of these. In endeavouring to elucidate the subject he says: "The ages of the subjects of this affection range between 5 and 80." Next, "That most of the cases develop between the ages of 20 and 30, and that the next most prolific decade is between the ages of 10 and 20."

This is evidently, then, not a disease of Anno Domini.

Between 10 and 30 is not the period of life when degenerative changes take place, and is not the most prolific time for gouty and rheumatic deposits to take place in the fibrous tissues of the body. This is the period of life when the functional activity of the body is greatest, and when the various vasomotor changes incident to catarrh are most likely to take place.

He then goes on to say, "The next point of interest is the extraordinary frequency of this affection. One quarter to one-third of all ear affections are of this nature, and probably a larger proportion, from the fact that only the advanced cases apply for relief. The absolute frequency as measured by the number of cases of the total population is very great."

"The majority of people have some involvement of the middle ear, and a majority of those so afflicted are cases of chronic sclerosis," or, as I would prefer to designate them, chronic progressive deafness.

Dr. Sam Seaton further says:—"Chronic or adhesive inflammation of the tympanum is an affection most prevalent in the damper portions of the temperate zone, where sudden changes of temperature associated with moisture of the atmosphere are liable to occur."

Now let us turn to Dr. Dench, of New York, one of the foremost modern authorities on the subject. Quoting from De Schweinitz and Randall's work on "Disease of the Eye, Ear, Throat and Nose," published in 1899, Dr. Dench says:—"The term chronic catarrh has in my opinion led to a very general misunderstanding among the medical profession in regard to the changes that take place in the middle ear in the disease under consideration. It would be much better to designate this affection as chronic non-suppurative disease of the middle ear. The word catarrh is so universally associated with some affection of the upper air tract that both the profession and laity have come to look upon a chronic catarrhal otitis media (so-called) [Collier] as the result of an extension of an inflammatory process from the nose and naso-pharynx into the tympanum by contiguity of structure.

(*a*) Abstract of a paper presented to the Manchester meeting of the British Medical Association, July-August, 1902.

"Catarrh is not a disease but a symptom, and from its derivation means a discharge.

"It may, therefore, result from various local lesions, and the idea so commonly entertained that catarrhal inflammation of the middle ear is always due to the extension of an inflammatory process from the nose and naso-pharynx is entirely unwarranted. *The influence exerted by an affection of the nose or naso-pharynx is usually purely mechanical.*"

"Thus in the case of adenoid vegetations within the naso-pharynx, the middle ear may suffer either from the direct pressure of the lymphatic tissue upon the mouth of the Eustachian tubes, causing a rarefication of the air within the tympanum, or this lymphatic tissue may interfere with the return circulation from the tympanum, thus causing a dilatation of the veins within this cavity and consequent congestion of the lining membrane.

"The obstructive lesions of the nose and naso-pharynx cause chronic middle ear disease, chiefly through their influence upon the tympanic blood current."

This quotation, published in 1899, is a pretty fair summary of the position I have taken up now for many years in reference to the ætiology of chronic progressive deafness.

Then what further is the position that I take up in reference to the ætiology of this affection?

I believe that in a chronic or neglected cold in the head you have the most fertile cause of chronic progressive deafness.

I am not alone in this contention. This is the general belief now in America.

Dr. Dench agrees with me that the influence exerted by any disease of the nose or naso-pharynx is usually purely mechanical.

The purely mechanical partial obstruction of the Eustachian tube associated with a chronic nasal and post-nasal catarrh, means a diminished or impeded supply of air to the tympanum. This diminished or impeded supply of air is quite sufficient to account for all the pathological conditions and symptoms found in this form of middle ear disease. Singularly enough, in a work recently written by Professor Friedrich, Privat docent of the University of Leipzig, and translated by Dr. Holbrook Curtis, Consulting Surgeon to the New York Nose and Throat Hospital, the following passage occurs printed in italics:—"It follows, therefore, that a fall in the tympanic pressure occurs in all diseases in which the pharyngeal orifice of the Eustachian tube is occluded," and, quoting from Bezold, says:—"In the middle ear, as in all vascular air-containing cavities, the volume of air diminishes whenever free communication with the atmosphere is interrupted, because the oxygen enters into chemic combination with the blood, and the amount of CO_2 given up is not enough to compensate for the loss of volume."

"The pressure variations give rise to a series of clinical pictures which are included under the general term of acute and chronic middle ear catarrh, and have as their most prominent symptoms retraction of the tympanic membranes, a purely mechanical result of the increased pressure in the external auditory canal.

"In the otoscopic image this abnormal position and the curvature of the tympanic membrane find their expression in the absence of the cone of light from its normal situation; in the presence of irregular reflexes, in displacement of the handle of the malleus, which assumes a more horizontal position or eventually even disappears behind the posterior fold, and finally in a marked projection of the short process and handle of the malleus from the retracted membrane.

"The subjective symptoms are, diminished auditory acuity and tinnitus aurium; occasionally the patient complains of pain." The author then goes on to explain how the hyperæmia ex vacuo results in acute cases in hydrops ex vacuo.

A greater similarity between the above quotation and remarks published long since by myself could hardly exist. It is gratifying to find that the conclusions I have long since arrived at are at last dawning upon our more enlightened Continental *confrères*. I am not without hope that our more conservative countrymen may soon be persuaded to acknowledge the correctness of these views and practise them. Then, and then only, will chronic progressive deafness cease to be an opprobrium to the profession of medicine.

It is to be hoped that the highly educated twentieth century practitioner will now recognise that a catarrh of the upper respiratory tract is not to be looked upon as "only a cold," but that it may be a pathological condition fraught with danger not only to the functions of hearing, speech and respiration, but even ultimately may threaten the very life of the subject by the secondary results of bronchitis, pneumonia and suppuration in and about the accessory cavities of the nose.

EXPERIENCES IN THE EXTIRPATION OF TUBERCULOUS LYMPH GLANDS DURING THE LAST THIRTY YEARS, COMPRISING OVER 300 OPERATIONS. (a)

By RUSHTON PARKER, M.B., B.S., F.R.C.S.,
Professor of Surgery in University College, Liverpool; Surgeon to the Liverpool Royal Infirmary; President of the Liverpool Medical Institution.

Having seen Prof. Billroth perform excision of enlarged tuberculous glands in 1871, the author commenced the practice himself in 1872, in which year he performed 28 excisions on 18 young persons, 6 male and 12 female, from 7 to 15 years old; publishing an account in the Liverpool and Manchester Medical and Surgical Reports, issued early in 1873.

During the thirty years that have elapsed he had performed the operation 318 times on 224 persons, 93 male and 131 female, aged from 1½ to 60 years.

The situations operated on were the axilla (15 times), the inguinal glands (10 times), the femoral (once), and the neck in the rest.

The writings referred to were those of Dr. Clifford Allbutt (International Med. Congress Reports, 1881, Mr. T. Pridgin Teale (*Brit. Med Jour.*, 1893), Messrs. W. K. Treves and Bertram Thornton (*Lancet*, 1888-1889), and Dr. Keen, of Philadelphia (*Brit. Med. Jour.*, 1894, p. 160).

The earliest published operations after his own in 1872 were those of Mr. Teale (1878 to 1881 and onwards), and there are some from from Mr. W. K. Treves (1884 to 1887) who said he had then practised the operation for years (*Lancet*, 1888, Vol. I., p. 105).

All these gentlemen agree with the writer in regarding other treatment than extirpation to be trifling waste of time, and have been at no small pains to get thoroughly rid of the disease, which is mainly quite local, and generally amenable to radical cure in this way.

The writer has carried extirpation to considerable lengths, and has performed prolonged and difficult operations, sometimes several in the same person, in very advanced and extensive instances of the disease, often in persons seriously enfeebled, with such manifest advantage as to result in total restoration of health and strength, as well as in eradication of tuberculous disease. Instances of this kind were specified by the author.

(a) Abstract of paper read before British Medical Association Meeting at Manchester, July-August, 1902.

Though the practice is widely accepted and freely adopted he considers that it should be universally impressed upon the profession as the only rational treatment, which should be applied with less delay than it often is, and thus diminish the proportion of advanced (which are frequently neglected) cases; in spite of attendant difficulties; and furthermore should be more readily undertaken by operators in cases which have reached advanced stages.

Note.—The day following the reading of this paper the author was informed, in Manchester, by Mr. F. C. Madden, Professor of Surgery in Cairo, that very great numbers of such cases are prevalent in Egypt, and was made aware of a paper on the subject by Mr. H. M. W. Milton, of Cairo, in the *St. Thomas' Hospital Reports* of a few years ago, dealing with a thousand operations of the kind. This paper the author read a day or two after, and found in it a confirmation of his own views and practice, from an experience altogether surpassing that which seems to fall to the lot of European and American surgeons.

A CASE OF TUBERCULOSIS OF THE RIGHT KNEE-JOINT IN A CHILD OF FOUR YEARS OF AGE, CURED BY MONOSITEISM. (a)

By A. RABAGLIATI, M.D., F.R.C.S.Ed.,
Honorary Gynæcologist, Bradford Royal Infirmary; late Senior Honorary Surgeon; Consulting Surgeon Children's Hospital.

Mr. President and Gentlemen,—The facts of the following case of tuberculous disease of the right knee-joint and of the lower part of the femur on that side are comparatively few, and may therefore be put into short compass, although the treatment of the case has extended over a long period of time. M. L. M., a child, æt. 4, was admitted in-patient into the Bradford Children's Hospital on April 23rd, 1901. The house-surgeon's notes on admission are to the following effect:—"Right knee is very much swollen. Skin is glazed over the surface. Over the external condyle of the femur the skin is red. At this point there is fluctuation; on palpation the joint generally has a doughy thickened consistence. The bones are slightly broadened. The right knee measures 11¾ ins., or 29½ cm. in circumference. Left knee measured 23 cm. Right thigh and leg are wasted."

April 27th.—Knee abscess opened above the joint, and the pus evacuated, and a quantity of soft gelatinous material cleared out by sharp spoon. Child's weight on May 27th, 1901, the first occasion on which it was recorded, was 28½ lbs. The temperature was as a rule sub-normal, varying from 97° to 98° F. for the most part, and not even reaching 99° F. after the operation referred to. The pulse was variable in rate. Thus on May 14th, 1901, it was in the morning 96, in the evening 96. On May 15th it was 80 and 100 respectively. On May 16th it was 100 in the morning and 84 in the evening. On May 27th, with a morning and evening temperature of 97° F., the pulse rate was 66 in the morning and 52 in the evening. These conditions may be described as conditions of depression on the whole, with some slight tendency towards reactionary elevation as regards the pulse-rate. At this time, also, the little patient was very much constipated. Thus, on May 14th, 15th, 18th, and 21st she required to have, or at least did have, pul. glycyrrhizæ Co administered. I may say here, in reference to this point, that for eight months past, since November 30th, 1901, to the end of July, 1902, no aperient has been administered, nor has any been required, the bowels acting with daily regularity. I should, however, say further, that while the child had aperients administered constantly from the time of admission, on April 23rd, till June 19th, 1901, she required none from that date till July 26th, 1901, after which she required no more till the month of November of that year. She had an aperient administered on November 6th, 1901, on the 7th, on the 12th, on the 18th, 24th, 28th, and 30th, and none since then. I draw attention, therefore, at this point, to the fact that whatever else has happened to the child during the time in which she has been subjected to this treatment, the action of the bowels has become perfectly regulated during its course.

I do not wish to weary you with details, and happily there is no need to do so, although the case has been under treatment for over a year; but in case there may be sufficient interest to follow it, I insert here a statement of the child's pulse-rate, temperature and weight on the 1st of each month, from her admission to the present time.

1901.	Pulse-rate.		Temperature.		Weight.
Month.	Morning.	Evening.	Morning.	Evening.	Lbs.
June 1 ...	76	72	97·6°	97·8°	28½
July 1 ...	116	108	97·4	98·4	30½
Aug. 1 ...	64	120	99 6	100	30¼
Sept. 1 ...	96	100	97	98 8	30¼
Oct. 1 ...	76	96	97·4	98 6	30½
Nov. 1 ...	92	82	98	98·2	29
Dec. 1 ...	110	100	97·8	98·8	30
1902.					
Jan. 1 ...	90	112	97	97	30⅞
Feb. 1 ...	84	112	97·6	97·8	34¾
Mar. 1 ...	76	112	97	99	33⅞
Apr. 1 ...	96	88	97·2	98·6	33½
May 1 ...	112	118	97	98·4	scales out of order
June 1 ...	84	96	97·4	98·2	35⅛
July 1 ...	86	90	97·8	98·2	87⅞

On looking at these records one may say of them briefly: (1) The temperature, though occasionally up above normal, has generally been subnormal, especially in the mornings. (Subnormality of the morning temperature is, however, a very common condition, commoner than is usually supposed.) (2) The pulse has generally been rather quick. And (3) there has been on the whole an increase of the bodily weight. This increase has not, however, been continuous, but has been intermittent in accordance with what appears to me to be the rule in the phenomena of the human body, and not only in it, indeed, but also in all, or nearly all, the other phenomena observed on this planet. The weight has risen and fallen, but on the whole has kept rising like a rising tide, and there has been since admission, fifteen months ago, a gain in weight of about 9 lbs. This is about the normal increase in a child of four to five years old, so that in this respect also the behaviour of the growing organism has shown a close approximation to the normal.

As regards surgical interference, there has not been a great deal. As has been said, pus (of a somewhat cheesy character), along with some gelatinous material, were cleared out soon after the patient's admission to hospital. The limb was kept quiet and under extension till July 30th, 1901, when the weight was left off. On December 11th, 1901, I opened the joint in front aseptically, to see if there was any suppuration in it, but I found none; only a doughy swollen, thickened synovial membrane, a small portion of which I removed. The wound so made healed rapidly by first intention; but the original wound over the external condyle of the femur was not quite healed till March 2nd, 1902. On April 2nd the splint, a poroplastic one, was left off, and the child was encouraged to use the limb in bed, and on May 10th to get up. On July 23rd the diseased knee measured 25 cm., against 29½ on admission, the sound one measuring 23 cm. in circumference. The last measurements are 25 cm. and 24 cm. respectively.

At the present time the child has no pain and no tenderness on pressure or tapping the joint or the scar, a great contrast to the irritable inflamed tender condition she was in on admission, when she cried painfully when touched. There is a considerable amount of limitation of movement in the antero-posterior action of the joint, combined with (what sounds a little incompatible but is not) too much lateral and unnatural movement from side to side. But the patient gets about very well now. At first on getting up she used to push a chair in front of her, getting about in that way. After that she pushed the weak limb in front of her, and brought the left up behind it. Now she is somewhat lame, but gets about very rapidly and without pain. Now that the knee has recovered much of its natural shape it is seen that she is somewhat knock-kneed on the right side, and no doubt this condition has acted as a predisposing and contributory cause of the joint disease.

(a) A Paper prepared for the Children's Section at the Annual Meeting of the British Medical Association, held in Manchester, July-August, 1902.

I now come to the central or most important point in this communication. From admission on April 23rd, 1901, till June 2, 1901, the patient had half a pint of milk at 8 a.m. and 4 and 8 p.m. with the same quantity of soup (beef tea, mutton-tea, chicken-tea, veal broth, or oxtail soup—it did not matter which) at 12 noon. It is easy to calculate the nutritive value of this diet. It amounts to about 450 grand calories daily, and is properly described as a restricted diet, or even a much restricted diet or an oligositeous diet. After June 2nd, 1901, the patient had her half-pint of milk in the morning at eight, and in the evening at six, and had a dinner at twelve noon, the same as the other children in the hospital; that is, a dinner of mixed diet, meat, potatoes, pudding; anything and everything that was going, variety being very properly studied in the housekeeping department of the Bradford Children's Hospital, as in other well-managed hospitals in the country. The gross weight of this dinner was found to be very steady. It has very rarely been as low as 1¾ lb. and not often so high as 2½ lbs., but day after day, for as long as ten days together, it has weighed 2¼ lbs. The weight has not differed very much from the dinner weight of other children in the hospital at the same age. It has not been any more than they have had, although the rule with the others has been that they had breakfast and tea in the usual way. At one period, I may say, in the history of the Bradford Children's Hospital, it was the custom to feed the children five times a day, viz., at six and nine a.m., twelve noon, dinner, and at 3 and 6 p.m. The other four meals consisted of bread and milk. The dinner consisted, as it does now, of a mixed fare, and, as bread was not excluded from it, the children had at that time bread five times a day. I think that that plan came to an end in 1899 for reasons to which no further reference need be made, but I may say that, to put it as mildly as possible, the children have not been any less healthy on a trissiteous *régime* than they used to be on a pentasiteous one, nor has there been any more epidemic disease among them—rather less I should say. The question whether we should look for the causes of epidemic disease in bad air, defective drainage, over-crowding and sanitary defects generally, so exclusively as we are at present doing, and whether we are justified in closing our eyes to the evil predisposition to epidemic disease due to kakositeism, as it has been termed, is a very important and interesting one, and I mention it here in order to hint that I am not at all satisfied that the prevailing opinions and customs on this point are well founded. It is certainly a fair question whether there would be as much epidemic disease among children in and out of hospitals as there is now if they were fed differently from the ways that obtain now, and whether, when or if epidemic disease does break out among them, the proper way to meet it and to prevent future epidemics might not be rather to alter the children's mode of living than to close hospitals to visitors and prevent the children's friends from coming to see them, as it is now so much the fashion to do.

I have called M. L. M.'s diet a monositeous one, that is, a dietary *régime* which consists of one meal a day. It is not quite that, of course, for patient has had a glass of milk in addition morning and evening. I suppose we may take it that, although milk varies much in constitution and nutritive value, a tumblerful of it affords 140 or 150 grand calories when its energy has been converted in the body into physiological heat. Besides these two very small amounts of food, I have relied for making the child's blood, maintaining her strength, repairing her tissues, healing her wounds, and increasing her growth and weight on the midday mixed meal which she has taken. As regards its nutritive value, I have had the different kinds of food which she has taken weighed and differentiated, and the following account has been given me of the food which M. L. M. took in a day. It has been taken over the average of a number of days, and may be considered an average sample. I have tried to convert it into calories, following, on the whole, Dr. Robert Hutchison's Food and the Principles of Dietetics; but much difference exists still in opinion between different authorities as to the calorie value of foods, and even between the views stated in different passages from the same author. No doubt different samples of the same food differ in calorie value. "Excepting meats," says Dr. R. Hutchison, quoting Bulletin 74 of the United States Department of Agriculture, "there is probably no one article of food which is liable to so wide a variation in its percentage composition as milk." Evidently other samples of food differ from one another also in the same particular. But following Hutchison on the whole, I have made these calculations. M. L. M.'s diet contained the following articles:—

Meat, 8 ozs., uncooked, equal to 118 calories; potatoes, 4 ozs. (R. H., p. 486 = 90 cs.), equal to 115 calories; bread, 2 ozs., and ½ oz. of flour, calculated as 1 oz. bread, making together, bread 3 ozs., equal to 200 calories; 1¼ pint of milk (R. H., p. 486), equal to 420 calories; sugar, a teaspoonful, say 4 grammes, equal to 16 calories; rice, a table spoonful, taken as ½ oz., or say 1 oz. bread, equal to 65 calories; total, 934 calories. Beefstock, 10 ozs., say 65 calories. As, according to Atwater, the diet of a child of three to five years of age should have 40 per cent. of the calorie value of that of a properly fed man, and as the said man ought to have 3,000 to 3,500 calories, 40 per cent. of that would be 1,200 to 1,400 calories, and M. L. M.'s diet, therefore, of 934 calories, or say, 1,000 calories must, from this point of view, be considered a starvation diet. But it has been nothing of the kind. A diet on which a child of four years grows in weight, improves in health, under which constipated bowels become regular, and a diseased knee recovers, cannot reasonably be considered a starvation diet; and I say that this case raises afresh the kind of consideration which for many years now has been forcing itself on my mind, viz., that the quantity of food necessary for life and health, for at least townspeople, is much less than our authorities suppose and state.

The low temperature or subnormal temperature which M. L. M. exhibited as a rule, especially in the mornings, is a very interesting phenomenon I think, and worthy of study. A subnormal temperature is a not uncommon phenomenon. In adults its presence precedes, often for years, the onset of chronic diseases like rheumatism, Bright's disease and cancer. I am not so familiar with it among children, but it may be induced, as may all, or nearly all, other alterations of functions in the body by opposite conditions, and among these conditions the quantity of food taken appears to me to be the most important. It is a condition of depression, and being so it is usually believed to be caused by too little food, and the remedy for it is, therefore, generally considered to be increase of the diet. No doubt if a person is starved to death over a long period of time the temperature falls before the end comes. But it does not seem to be generally recognised that too much food is also a potent and a frequent cause of depression of temperature. I believe, indeed, that the presence of a subnormal temperature is far oftener caused by too much food than by too little. Of course I need not say how wholly differently we shall be compelled to set about the attempt to rectify the condition and to raise the temperature, according as we take one or other view as to its causation. The man who believes it to be due to too little food, to oligositeism, will recommend an increase of food; while he who believes it to be due to plethora, or polysiteism, will restrict the diet. It is one of the most difficult things in the whole range of medical practice as generally conducted to raise a subnormal temperature to natural; and I do not myself doubt that the reason of this is that we have no clear ideas in our minds as to its causation. As I have said, I believe it is almost always due to a long course of taking too much food, and, therefore, that in the large majority of cases (practically all, for we very rarely have to deal with such a case, *e.g.*, as of men exposed in a boat after shipwreck for fifty days with, say, ten days' provisions on board; this case is very rare indeed in civil practice) we must treat it by restriction of the diet. I once raised a subnormal temperature of 96° in a man by inducing him to undergo a course of starvation or asiteism for twenty-eight days. At the end of that time his temperature had risen to normal. If you attempt to raise a subnormal temperature caused by polysiteism by increasing the diet you cannot succeed. And what you do do is to induce a set of feverish attacks, when the temperature rises much above normal, settling down again after recovery into the subnormal temperature, which your efforts were directed to rectify. Let me set down here what seems to be the law as to the relation between the action of stimulus and the presence of function in organisation. I am thinking of food as the stimulus for the moment, of temperature as the function, and am proceeding to generalise.

1. In the absence of stimulus there is no function. (If organs are not supplied with nutriment they cease to act.)

2. In the presence of too much stimulus there is also absence of function. (If organs are supplied with too much nutriment they cease to act.)

3. In the presence of moderate stimulus there is normal function. (If organs are supplied with their proper amount of nutriment, neither too much nor too little, function is normal or natural.) These are very different propositions, allow me to say, from the statement that might have been made that, for example, absence of function is *caused* by absence of stimulus. I do not think we are entitled to say the latter. What we are entitled to say is that absence of function and absence of stimulus are co-ordinated and co-related. We are not entitled to say which is first—which is the cause of the other—at least, not till after a long philosophical inquiry very interesting, no doubt, to some minds, perhaps to all, but to enter on which as it would lead us very far on the present occasion, there is no time nor opportunity for. Let me just say in this connection that there are three possible views of the nexus which may be stated thus: Either (1) the thing is the cause of the thought, or (2) the thought is the cause of the thing, or (3) the thought is the thing. We may each of us have our own idea which of these possibilities contains the proper answer to our question, but happily we are not called on to state it here any more than we are called on to answer the question whether the hen or the egg was first. Suffice it to say that each follows each in invariable sequence, that they are co-ordinated and co-related, and might even be successive effects of a common cause.

These propositions appear to me to be translatable into all and every function of the body. Mark Twain's shipwrecked men who were forty-three days in the boat with ten days' provisions, and who were saved as by a miracle at the end, had had no action of the bowels, for in some cases twenty and thirty days, and in one case it was forty-four days before the bowels acted after the man had been saved. In the absence of stimulus there was no function. And there were two reasons for this: First, there was nothing to pass, the men were entirely empty; second, there was no strength to void it if there had been. The men were at the point of death from starvation, and weak in proportion. But by far the commonest cause of constipation is too frequent and too abundant feeding; so that if a person is constipated on four meals a day he should try three for three months; but if that does not put him right, especially if he alters the sorts of foods he takes at the same time, he ought to try two meals a day for three months, when he will in most cases become regular. But if he does not do so, he ought to try the effects of one daily meal, when, as in M. L. M.'s case, he will nearly always become regular. In the case of constipation being caused by starvation, the function is checked by too little. But in the case of constipation being caused by too frequent and too abundant feeding, the function is plugged or clogged by too much. I need hardly refer to the analogous case in business. Business comes to a standstill in two conditions; first, when there are no stocks to buy or sell, for in the absence of the stimulus of stocks the business function of the commercial organism ceases. But secondly, business comes to a standstill when stocks are too abundant and too heavy, because in such condition traders are afraid to buy and sell, lest, instead of making a profit they should sustain a loss. Therefore the presence of too much stimulus also clogs the function of the commercial organism. Lastly, when stocks are normal, proper, and neither too light nor too heavy, business goes on merrily and in a normal manner, for in the presence of a normal amount of stimulus the business function of the commercial organism becomes normal, with a gentle up and down movement of more or less, but with no depression of panic and no feverish excitement boom. But just as the business expert called in to advise the community how to act in the case of business being clogged by too much would be insane if he advised them to make more and heavier stocks, and ought, on the other hand, rather to advise them to use up what they had before they proceeded to manufacture more, so the doctor must be very careful what advice he gives about food ordered to meet a bodily depression which may be caused by too much. On the other hand, the depression of trade caused by the absence of stocks must be met by the advice to make stocks, to be industrious and to be active; and the depression due to direct starvation must be rectified by cautious increase of the diet. I think there are signs that M. L. M.'s subnormal temperature is in course of being elevated to normal, but the long length of time during which it has remained so low makes me ask myself, I must confess, whether even her one meal a day is not yet a little too much for her. This subject is intensely interesting, but I cannot dwell longer on it, and so will only say that the three propositions I have laid down seem to me to be true of all functions whatever, of sleep, of respiration, of cardiac action, of the action of the genito-urinary function, the general paradoxical statement holding true that absence of function may be induced by opposite conditions. There are other paradoxes with which we have to come in relation also in the practice of medicine, but I do not even mention them here; neither shall I be tempted to dwell any longer on considerations which I confess are very fascinating to me, but might lead us very far away and take up more time than we have at our disposal. The fundamental principles of medical practice are involved here.

In conclusion, gentlemen, let me invite you to reflect upon the case of a growing child suffering from a tuberculous or wasting disease, and who has been successfully treated not by increase but by restriction of her diet. An ounce of fact is worth tons of theory, but he will be the best interpreter of nature whose theory harmonises best with his facts. Restriction of her diet has resulted in the course of a year and a quarter in perfect regulation of the action of the child's bowels, in normal growth and increase of weight, from 28½ lbs. to about 37 lbs., and in the complete cure of a tuberculous suppuration and necrosis of the lower end of the femur, and disease of the knee-joint. It has not yet elevated her temperature to natural, nor has it succeeded in preventing too great inequalities in the range of the temperature readings between night and morning; neither has it yet lowered the pulse-rate to natural. But I think it is in course of effecting both of these tasks, and I look forward hopefully to being able to effect both of these achievements in the course of, say, another year or so.

I am strongly tempted to say a word, in conclusion, on tuberculosis in general. If tuberculosis be admitted to be an inflammatory disease (an inflammation) accompanied or associated with the growth of the tubercle bacillus in the tissues or blood, it is quite evident that we have two factors demanding consideration, viz., first, the state of the tissues which harbour the micro-organism; and secondly, the micro-organism which is harboured. In other words, both the soil and the seed demand consideration. Now, of the two, I incline to consider the former much the more important, and the idea which impresses itself on my mind (to be further developed on a future occasion) is that the long-continued inflammation which attracts the tubercle bacillus (it does not, of course, *create* it) is itself a consequence of long-continued irritation of some sort; and more precisely that it is very often the consequence of the long-continued irritation of wrong feeding (malnutrition), and that, still further to particularise, it is far most frequently the consequence not of under-feeding, but over-feeding. How very important this point of view is, and how far-reaching its effects on treatment, may rise before the imagination, but cannot be entered on, much less dealt with, now.

Medico-Chirurgical Notes.

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BILOCULAR STOMACH.

Among congenital diseases of the stomach abnormal constriction of the body of the viscus and the occurrence of partitions abnormally dividing it are usually included, even in such a comparatively recent book as that of Ernest Ziegler.

Pathologists of the seventeenth and eighteenth centuries were content with describing the condition when found without advancing any hypothesis. Brinton in his classical monograph on abnormalities of the stomach refused to recognise them as congenital, and looked on them as acquired. This view received confirmation from Sutton sixty years afterwards, who in his Erasmus Wilson lectures pointed out that the abnormality is not a condition of fœtal life, neither is it to be considered a reversion to the herbivorous stomach, which is a highly specialised one. Sacculation occasionally occurs as a port-mortem change, and, as shown by Carl Rokitansky, said form of the anomaly is easy of recognition.

Although the disease is an unusual one a good many cases are scattered through the writings of the older pathologists, the most common form being constriction of the stomach, such as Dutton pictures in "Evolution and Disease." Of these the great majority occur in women; but that the male sex is not exempt from the disease is shown by the case recorded by Blasius. As might be suspected from his diligence in dissection and his accuracy of observation, Morgagni came on some cases of the abnormality and has put four such on record. His first case was that of a woman on whom he successfully performed Cæsarean section. Her "stomach was contracted almost in the middle of its length and swelled out on both sides, but less on the right, which part descended obliquely, the other being placed transversely." In his second case, "the stomach was contracted, and where it began to approach the antrum pylori it was still more contracted, so as to be in some measure divided into two cavities." His third case was marked by "contraction in the middle, so as to resemble the straightness of the pylorus." The fourth case was well marked, "the stomach appeared to be almost double, so suddenly was the cavity contracted before it came to the antrum pylori."

All the six cases referred to above were sacculated by a transverse contraction, by far the most common form of the abnormality.

An unique case is placed on record this year by M. Bouveret, which shows how difficult it is to diagnose some forms of the disease.

The patient, a woman, æt. 45, came under the care of M. Bouveret in 1877, complaining of a large tumour in her left hypochondrium. It extended from the spine of the ilium to the diaphragm, and was wholly confined to the left side. On examination it was found to be dull on percussion, and it gave the sensation of a huge cyst with greatly distended walls. The diagnosis of an hydatid cyst of the spleen was made, and as the tumour seemed on the point of bursting it was punctured with a Potain's trocar. Two litres of a brownish liquid, of an unusual quality for hydatid cyst, was drawn off; on comparison with some fluid vomited by the patient the resemblance was so close as to lead to the conviction that the stomach had been tapped. The operation gave her great relief, and she disappeared from M. Bouveret's clinic. In 1898 she came under the care of M. Bard, when an operation was proposed and refused. Dreading any surgical interference she left hospital on March 3rd, and on April 19th following, during a severe fit of vomiting, the tumour burst and the woman died. A post-mortem revealed a strange condition of dilatation of a bilocular stomach. The cardiac orifice and the cardiac enlargements occupied their normal positions, but the lower portion of the body of the stomach had become enormously distended, so as to fill the whole of the left side and press on all the surrounding viscera. The lesser curvature was normal in size and position, but the organ was divided into two cavities, a small superior one and a large inferior, separated by two thin, valve-like flaps, one attached to each extremity, right and left of the opening from the upper to the lower cavity. At the cardiac end the food or liquid entering the stomach flowed readily into the lower chamber, as blood from the auricle to the ventricle, but on trying to pass any fluid into the upper chamber from the lower the valve was raised and the small upper chamber shut off so that nothing could enter. In a similar way the duodenal extremity was shut off. Such was the pathological condition found.

It is noteworthy that after the stomach was punctured the patient was greatly relieved. She drank fluids and took food without vomiting and continued well until the lower cavity filled again.

There is little doubt that an operation would have not alone given relief, but have prolonged life, and if not cured the patient, it would, at all events made life tolerable.

Special Article.

IS SYPHILIS AN ANCIENT DISEASE?

The approach of the International Congress of Venereal Disease, which is to hold its meetings at Brussels in September, should form an incitement to all members of the medical profession to contribute—as far as abilities and opportunities allow—by advice and by action, to the removal of this, one of the foulest blots on the physical history, as it has been one of the foulest enemies of the physical welfare, of the whole human race. The historic mystery of its origin, and the secretive factor necessarily connected with individual infection, have specially contributed to its long residence among us. All students of the history of medicine—as all true members of the profession should be—are familiar with the old story that the "lues venerea" was imported by the crew of Columbus from Hayti, and was communicated to the French besiegers by the Spanish garrison of Naples in 1494, and thence rapidly dispersed throughout Europe. But it was only after thirty years had elapsed from the introduction of the "French evil" into Italy, and its baptism with the name of "Morbus Gallicus," that the idea of its importation from the recently discovered Western Continent appears to have found its way into print. During the first quarter of the sixteenth century—down to 1525, and, in some cases, later still—the various medical authorities who wrote on the subject offered a great many varieties indeed of theoretical and fanciful explanations of the origin of the new venereal plague. The catalogue of "causes" is a long and, somewhat gruesomely, amusing one; but the assertion of its growth from an American germ is conspicuously absent. Those of our readers who have some knowledge of the hopelessly entangled connection of medicine with mysticism, metaphysics, and theology, which prevailed during the scholastic centuries, are, of course prepared to grasp the central factor in the generation of the inspired confidence with which two of the most prominent and most learned physicians of that age announced their belief that the origin of the French disease was due to the close conjunction of the sun with Mercury, Jupiter and Saturn, which happened in the year 1483. As it so happened that the year in which the great initial epidemic of venereal disease spread over Italy was also one characterised by exceptionally heavy rains and inundations, the still more famous physician, Nicolaus Leonicenus, discarded the astrological theory of Corradino Gillini and Gaspare Torella, and advanced the (less elevated) meteorological one, that the outbreak of this foul disorder was really engendered by the excessive amount of moisture then existing in the heavens above, and in, as well as on, the earth beneath. The great reputation of this physician governed the opinions of many subsequent authorities. Manardi and Paracelsus both ascribed the origin of the new disease to the intercourse of a leprous man with a prostitute: the former knew of the case—the gentleman was a Valentian by birth; the evidence obtained by Paracelsus was similar, but the male partner in his case was of French nativity. The learned and—deservedly—famous Antonius Musa Brasavola, of Ferrara, informed the professional world that the original epidemic of the French evil spread from the person of a female camp-follower of the French army at the siege of Naples. She had suffered from an abscess at the mouth of the uterus. But a widely divergent explanation of the source was offered by Gabriel Fallopius of Modena, the celebrated anatomist and physician, whose name has become immortalised in connection with the human oviduct. He avers that the Spaniards at the time when they were hard pressed by their French besiegers, poisoned the wells from which the latter obtained their water-supply, and that the new epidemic arose from that cause alone. The celebrated physician of Pope Clement VIII., Andrea Cesalpino—one of the foremost claimants to the credit of the discovery of the circulation of the blood—tells us that he learned from those who were present at the siege of Naples, and the other operations of that campaign, that the disease really originated at the siege of Somma, a village of the Vesuvian territory. There was a great quantity of an excellent, and much coveted, Greek wine shut up there. One night the besieged Spanish garrison managed to effect their escape, leaving behind them the greater part of their wine—which they had previously mingled with the blood of the sick of San Lazaro. The French besiegers, on entering the place next day, with the usual pillaging instincts of "that dissipated nation," drank freely of the luscious wine—after which they soon developed venereal symptoms. The learned Bolognese physician, Leonardo Fioravanti, states that he was informed by the son of a person who had been sutler to the army of Alfonso, King of Naples, that when the meat supply began to run short on account of the prolongation of the war, this sutler supplied both camps with dressed human flesh instead. The unconscious cannibalism which followed the gruesome fraud so effected, was the immediate cause of the development of the Morbus Gallicus. Our own very famous Lord Chancellor Bacon quotes this story, as he does so many other "old wives' tales," with patronising credulity; and tells us, too, that the human flesh supplied on that memorable occasion was of men killed in Barbary, and which had been prepared and dressed after the manner of tunny fish.

A strange "conjunction" of events of thrilling historical importance it surely was, that Europe should have been almost simultaneously affected (and inflicted) by the conquest of a new enemy, the Turks; the discovery of a new continent, America; the infection of a new disease, syphilis; the introduction of a new art, more revolutionary and iconoclastic than any of its forerunners, printing; and the propagation of the new theological doctrines which collectively constituted the so-called "Reformation." Whether the "Morbus Gallicus" was really new to Europe, is a question which, as of course all our readers know, is even now very strongly contested. The descriptions of disease in the classical ages are generally rather vague; and lesions of the genital organs would, probably, be dealt with in less detail than others. But the public castigators of the type of Juvenal and Martial offer many very significant allusions. The lines of Catullus, in which he so mercilessly attacks the morals of Julius Cæsar are, certainly, very suggestive:

"—— *maculæ* pares utrisque
Urbana altera, et illa foramina,
Impressæ resident nec eluentur."

The great French geographer, André Thevet, informs us that the French evil was endemic in Africa, along the regions bordering the river Senegal. J. Bonzius, who was physician to the Dutch settlement in the East Indies, affirms that the same disease was endemic in Amboyna and the Moluccas. And Cleyer, the first physician of the Dutch colony in Java, tells us that the venereal contagion was a natural endemic product of that great island, and as common there as the quotidian ague. We are told by Herrera that Magellan and his crew—in the first circumnavigation of the globe—landed at Timor, an island of the Moluccan Archipelago, and there found a great number of the inhabitants affected with the "French disease," although previously unacquainted with Europeans of all nations! Astruc, the author of the classical work on "Lues Venerea," questioned Forneau on the subject, who had long lived among the Chinese, and who had investigated their customs and penetrated their secrets as only a French Jesuit can. He was told that the Chinese physicians believed that the disease had existed there from the earliest antiquity: the authors of their oldest books referred to it as an ancient disease. Then, turning our attention to the names of more sacred countries and persons, we find theological authorities of the greatest learning defending the opinion that the multiform cutaneous ills from which Job suffered were syphilitic lesions. So firmly was that idea rooted in the Italian mind at the time of the original outbreak of the Morbus Gallicus that we have the testimony of the contemporary author Fulgosio to the effect that, even from the beginning, some called it *Morbus Sancti Jobi*. Since then, other saintly names have been attached to the disorder: it has at various times been referred to as the disease of St. Mevius, of St. Roch, of St. Sementius. From the original historic locus of its development, it has also been called the "Morbus Neapolitanus"; and from the hypothetical Spanish-American importation, it received the compound epithet of "Scabies Hispanica." The racial antipathies of dirt-throwing patriots sometimes transferred the prevalent association to other nationalities, and replaced the French surname by that of the people whom they most detested. Thus it was sometimes called the "German disease," "Polish disease," "Turkish disease"—by the Turks, the "Christian disease," and so on. The name syphilis, which to the present day remains the *pons asinorum* of surgical etymologists, appears to have been first popularised, if not invented, by Fracastorio. Whether the loathsome plague was one of local West Indian origin, as has so often been maintained, or of cosmopolitan diffusion, which would seem more likely, it is one which owes its existence to impure contact, and is most assuredly preventable. Let us hope that the coming International Congress will formulate the best advice on the subject, and that its suggestions may be rapidly utilised throughout all civilised communities.

France.

[FROM OUR OWN CORRESPONDENT.]

PARIS, August 23rd, 1902.

Chlorosis and Sudden Death.

Professor Hayem relates a case of sudden death of a patient affected with chlorosis and caused by obliteration of the pulmonary artery.

A patient, æt. 21, became chlorotic a short time after being "regular." Two years before her entry into the hospital she suffered from phlegmasia dolens in the left leg, and a year subsequently she complained of palpitation and considerable dyspnœa. When examined in the hospital she was found to have violent tachycardia, and complained of constant headache and showed all the usual signs of advanced chlorosis. Ten days after admission the patient had a violent emotion, and sitting up in bed gave one cry and fell back dead. The autopsy revealed complete obliteration of the pulmonary artery by clots of blood, of which some were ancient, adhering to the walls of the artery, and others recent. Examination of the heart proved that the clots had their origin in the heart, where similar ones were found.

MEDICAL TREATMENT OF GASTRIC ULCER.

The same author recommends the following treatment for gastric ulcer. First of all rest in bed and absolute rest of the stomach. As the gastric juice is only given out under the influence of food, the stomach should remain completely empty for several days. To ease the thirst, however, a little water may be given from time to time, or, better, some mineral water of alkaline properties. Alimentary enemas will replace the ingestion of food, consisting of two eggs, peptone, carbonate of soda, and a little salt. Three or four of these enemas are given daily. The period of suspension of food varies from five to twenty days. Large doses of subnitrate of bismuth are prescribed as a protective dressing to the ulcer, and revulsion over the epigastrium produced by hot applications.

The second stage of the treatment consists in the gradual administration of milk and alkaline water, and after a month or five weeks a mixed diet is allowed, and finally the milk is suppressed. At this moment, or third stage, Carlsbad waters will be found very useful.

RHEUMATISM.

According to Dr. Desplats, the juice of lemons is an excellent remedy for rheumatism, acute or chronic. He considerably relieved an old woman who suffered much from chronic rheumatism, and was almost a cripple from the malady. A similar success attended its administration for acute rheumatism in a young girl, while in three days he cured himself from erratic rheumatic pains. He advises two lemons daily to begin with, and increase gradually until the desired effect is obtained. He tried to substitute for the juice citric acid, but he found that the patients could not tolerate a sufficient amount of this acid. Dr. Vigues has the same high opinion of the efficacy of the juice of lemon, not only in rheumatism, but in gout. Although it did not cure a malady which is in itself incurable, it relieved the pain, and that was a great point. On the other hand it in no way disturbed the digestive functions nor did it produce anæmia.

WHOOPING-COUGH.

The treatment of whooping-cough is, as every one knows, more or less empiric. A list of the numerous agents recommended for that mysterious and spasmodic affection would fill a book, a fact which considerably diminishes the value of any one of them, and yet the list is far from being closed; it will, on the contrary, likely remain open till the end of all time. Professor Amat reports two cases considerably relieved by inhalation, at the moment of the attack, of iodide of ethyle, which relieves so promptly attacks of asthma. The children were two and a-half years and six months old respectively, and with attacks so frequent that they became almost emaciated. Under the influence of these inhalations the attacks began to diminish in number, and finally at the end of a fortnight they disappeared completely.

M. Mya prefers pyridine, which he so largely employed in the treatment of asthma. Twice a day he places a teaspoonful of the liquid on a plate and draws it near to the cradle or bed of the little patient. At the same time he prescribes a mixture containing bromide of potassium, strontium and bromide of ammonium in order to diminish the reflex excitability of the brain.

HÆMORRHAGE IN GASTRIC ULCER.

Ergotine, ʒj;
Galic acid, x grs.;
Syrup of turpentine, ʒiv;
Water, ℥v.
Chloride of calcium, ʒj;
Syrup of opium, ʒiv;
Water, ℥v.

A tablespoonful of one of these mixtures alternately every hour.

Germany.

[FROM OUR OWN CORRESPONDENT.]

BERLIN, August 23rd, 1902.

WOUNDS OF THE LIVER.

IN the Zeitsch. f. Chir., Dr. Grekow, of St. Petersburg, reported three cases treated by himself. In two the injury was in the left lobe, and in the right in the other case. The two first were sutured, and the last was packed. In all the cases the hæmorrhage was arrested completely and all recovered. The writer considers suture to be the normal treatment, and as such to be carried out in all cases in which the injury can be brought into the field of vision, and that this will be the case in all or nearly all injuries on the left lobe, on the free margin, and those on the anterior and under surfaces of the liver near the free margin. In all other cases the tampon should be employed, and valuable time should not be lost in trying to bring the wound into view.

In the same journal five cases of rupture of the liver are reported by Dr. Finkilstein. In all the wounds were subcutaneous, and caused by blunt force. One died a few minutes after admission into hospital before any attempt could be made to rescue the patient, and in the remaining four cases laparotomy was performed. One died one hour after operation and the remaining three recovered. In two of them, along with extreme anæmia, there was peritoneal irritation, so that a suspicion arose that the intestine was injured also; this proved not to be the case, however. The bleeding was arrested in all cases by tamponnade, and the author considers this to be the proper line of treatment in this class of injuries. The attempt to unite the bruised and broken down edges of the wound offers but little prospect of success, and the time consumed in it makes it dangerous. It is important when removing the tampon to do it gradually and piece by piece, and not to remove it too early.

R. Stintzing, of Jena, has an article on

PLEURITIS

in the *Deut. Klinik.* He recommends the retention of the old classification into dry and exudative pleurisy and the latter with sero-fibrinous, hæmorrhagic and purulent. It is generally a secondary disease, most frequently caused by disease in a neighbouring organ, and above all the lungs. It usually arises from extensive *per continuitatem* of the original process; transference by the lymph tracts is more rare and least frequent through the blood channels. Ordinary pleurisy is a great rarity. Ætiologically the following forms are to be noted:—

1. Tuberculous pleurisy the form most widely spread, embracing nearly one-half of all the cases. It appears as dry or exudative pleurisy; more rarely as empyema. Hæmorrhagic effusion form, a rare exception.

2. Metapneumonic pleurisy, the second in regard to frequency, commences simultaneously or in connection with pneumonia, and set up by the pneumonic diplococcus. It runs a course serous or purulent.

3. Rheumatic pleurisy the third in frequency. Cases are to be classed as rheumatic that occur in association with an attack of articular rheumatism; it is sero-fibrinous.

4. Syphilitic pleurisy is rare, runs a course as dry pleurisy, and belongs exclusively to the tertiary period.

5. The staphylo- and streptococcus pleurisies are mostly inflammation following influenza, diphtheria, typhoid, sepsis, &c.

There are also mixed infection, and, further, the bacterium coli in cases of pleurisy and perityphlitis. Pleurisies after cardiac and kidney troubles and cancer are secondary. Chills and injuries are favouring accessories to their onset. As regards treatment, the question of puncture is an important one. The three indications are the well-known ones: (1) The vital in acute pleurisy, with grave symptoms as regards cyanosis and breathing; (2) the extent of the exudation, leading to ineffective respiration and cardiac action with extensive dulness; (3) imperfect absorption of medium exudations. There is no common point of time for puncture; the most favourable will always depend on the individual case. If the exudation extends beyond the fourth rib behind the middle of the scapula the evacuation must be made without regard to time, and fever is not a contra-indication. With good diuresis puncture may be delayed, but with scanty urine of high specific gravity puncture should be resorted to. As regards the quantity to be left, all should be removed that comes freely and without aspiration, let the quantity be what it will, but as a rule 1½ litres will be enough to remove.

In hæmorrhagic pleurisy puncture should be delayed as long as possible, and not more than 500 ccm. should be removed at a time; frequent repetition is generally necessary. In old sero-fibrinous exudation aspiration is required, and it is desirable to repeat the puncture in various places and to be content at one sitting with removing what comes away without too much aspiratory force. Uusually the fifth and sixth intercostal spaces are the most suitable spots for puncture, and an exploratory puncture should always precede the more important one. In purulent exudation simple puncture is indicated in urgent cases as a preparatory measure, and in tuberculous empyema. Radical operations for empyema in advanced phthisis rarely recover or heal up, and here frequent punctures at intervals of eight to fourteen days, taking away not too much at one time, are better.

Austria.

[From our own Correspondent.]

Vienna, August 23rd, 1902.

Supra-Condyloid Fracture of Humerus.

At the "Deutscher Aerzte" in Prague, Hilgenreiner showed a man, æt. 61, who suffered from "flexional fractured humerus" from a fall without pain or disturbance of function, and it was not till eight days after the accident that he consulted a doctor in reference to the swelling of the arm which he attributed to the fall. Hilgenreiner recognised the fracture at once, but the absence of pain and functional disturbance led him to employ the Röntgen rays, which confirmed the diagnosis. He put the arm in splints for eight weeks without success, union being as defective at the end of that time as at the beginning of the treatment.

All treatment was then abandoned, as the patient had good use of the limb and no pain. The fracture was not angular but straight, and therefore there was no displacement. He attributed this functional phenomenon to a general condition of exalted hypalgesia which existed throughout the subject. This case he thought raised an important point in forensic medicine as to how far functional disturbance or pain can be produced by fractures. During the last five years he had observed in Wölfler's clinic twenty other cases presenting this remarkable phenomena when carefully tested, so that the case is not an entirely isolated one.

From a therapeutic point of view, the proper treatment would be extension, just as in dislocation of the epiphysis, with forced flexion of the elbow-joint. In this case he would not recommend such treatment, since it would entail confinement to bed, which might be positively injurious to a man of such active habits.

Rectal Carcinoma.

Schloffer showed a patient from whom he had removed the rectum, together with the uterus and adnexa, on account of the extensive area affected. The patient was at the present time perfectly healthy.

Gussenbauer opened a discussion on the histogeneses of carcinoma, and affirmed that the disease was *parasitic* in origin. In most of the examinations recorded the same results are recorded. He was equally confident that the disease was infectious, of which the records afforded irrefutable evidence.

Petersen referred to the recurrence of carcinoma, and thought it could be clinically divided into recurrence with no connection to the primary tumours and those directly connected therewith. The latter again might be due to a fragment of the original growth being left behind; the former by indirect extension of the morbid virus to neighbouring tissues disposed to take on the disease. The question whether every cancer cell left behind was capable of recurring, or causing a recurrence of the disease, might be answered in the negative, as many of them seemed to perish. In skin affections the giant cells stood as warders and destroyed the cancer cells, nature herself thus bringing about partial recovery unaided. In these cases tuberculosis is often counterfeited, but no tubercle or degenerative caseous matter can be found. Again, the entrance of the cancer cell into the blood can also be prevented and its destructive action annihilated. Notwithstanding these facts, we are not justified in leaving behind any cancer cells that can be removed when operating.

Mikulicz said he had operated on 106 cases for carcinoma of the bowel, which might be more correctly described as 100 genuine carcinomata, five sarcomata, and one epithelioma. The male sex suffered most from this disease. His cases agreed with others in being 80 per cent. males and 40 females, occurring at all periods in life, the favourite site being the cæcum. The disease comes on very insidiously, without any apparent disturbance in the canal, which may remain free from any recurrence for many years after, till stenosis or ileus occurs. He preferred the double operation; first, the removal of the diseased fragment of bowel attaching the ends to the external surface; at a later operation the ends of the bowel are brought together and the wound is closed. By this means peritonitis is avoided and the mortality reduced. His own experience was that the single operation had a mortality of 38·4 per cent., while that of the double operation was only 12·5 per cent. He regretted to have to state that the longest period of perfect freedom from the disease was four years.

Hochenegg said that he had now operated on 282 cases of carcinoma of the bowel, and of three of cancer of the sigmoid flexure; one lived six years perfectly immune from cancer, while the other two never suffered from any carcinomatous changes whatever. He was very much in favour of the sacral method, as he had obtained better results, particularly in the rectal cases, of which he had now performed 174. He lost one case from collapse and heart failure, and one from hæmorrhage eight days after the apiration. He could not endorse the dictum that cancer necessarily returned within three years, since out of 174 cases thirty had remained perfectly healthy and strong, who were operated on many years ago.

Krönlein asked if carcinoma of the stomach was cured by apiration or only palliated, or did the operation prolong life or only make it tolerable. His experience of 264 cases, 195 of which were operated on and sixty nine left untouched, was that, starting from the commencement of the disease, the average duration of life was three months after gastro-enterostomy and fourteen months for gastrectomy. Still individual cases are more successful, as there are still nine alive of the gastro-enterostomy cases and thirteen of the gastrectomy; of the latter it is now eight years since the operation in one case, and in another four years, three years, then two years, and six in their first year after operation of gastrectomy alone. He had no doubt that the latter operation prolonged life, at the same time making it more comfortable.

SEA SICKNESS.

Fischl read a paper on "Mal de Mer" embodying two years' observations in Lloyds as ship doctor. After reviewing the various reputed specifics for the ailment, he stated that nothing had so good an effect as diet in respect of the headache and sickness. Food should be given in small quantities. Kramer found that the choroid and retinal vessels were greatly contracted, leaving the fundus pale during the attack, a fact which indicated the necessity for lowering the head to increase the blood supply. He states that he faithfully devoted himself to this scientific treatment with considerable success. In sixty-nine of the cases two hours with the head low relieved the headache and vomiting. He added that very great injury was done to tuberculous subjects by permitting them to go to sea.

In the discussion Weleminsky said that he took exception to the observation in respect of tuberculous subjects, as English authorities had long been in the habit of sending their consumptive patients to sea with reputed good results; indeed, they were still in the habit of advising their patients to take a sailing vessel in preference to steam, so that the sea exposure might be greater. In addition to this they are in favour of anchoring sanatoria in bays and rivers for this purpose.

Continental Topics.

[FROM OUR SPECIAL CORRESPONDENT.]

"MAL DE MONTAGNE." OR MOUNTAIN-SICKNESS.

EVERY year the mountaineering spirit develops itself more and more among our Continental neighbours, not merely in an increasing number of holiday visitors to the Alps and other high ranges, but in genuine athletic ascensions of difficult and dangerous peaks. The rapid extension of mountain railways and of funiculars, and their steadily increasing crowds of tourist-passengers, testify to this growing love of high lands and glaciers. Naturally, therefore, at this season there is much talk at *table d'hôte* in hotels of "mountain-sickness," and opinions are given freely as to the causes and the effects of *mal de montagne*. Usually the malady and its concomitant vertigo, nausea, heart-fatigue, lassitude and exhaustion are ascribed to two distinct causes, each of which is more or less strongly maintained by its respective advocates. One opinion is that mountain-sickness is caused by the diminution of oxygen in the rarefied atmosphere, or by the diminution of oxygen in the blood, in consequence of the muscular exertion in ascending heights. The other opinion is that partial asphyxia is produced by carbonic acid which freely dissociates, under the reduced atmospheric pressure, from the internal combinations of the organism.

Dr. Mosso, of the Turin University, has been led by a series of experiments to the conclusion that mountain-sickness is chiefly due to the diminution of carbonic acid in the blood to a degree which he calls *acapnos* (without carbonic acid). Carbonic acid escapes from our tissues as soon as atmospheric pressure begins to diminish. Hufner has shown that the dissociation of oxygen from the blood-globules is not produced under altitudes of from 3,000 to 4,500 metres. There is consequently a loss of carbonic acid as the air-pressure lessens, and after attaining an altitude of 3,000 metres there is also a concurrent loss of oxygen.

To determine the effects to be attributed to these gases in producing the malady, Dr. Mosso has breathed various proportions of oxygen and carbonic acid under increasing barometric depressions; and he has made similar experiments upon his assistants and associates. By these experiments in rarefaction he has brought on mountain-sickness in his laboratory under pressures of 246 mm. and 236 mm.; corresponding to altitudes of 6,500 metres and of 8,800 metres. At these pressures it was impossible to overcome the sickness with inspirations of oxygen alone; somnolence and nausea supervened. But by breathing simultaneously the carbonic acid, the somnolence and nausea did not appear. At 6,500 metres the operator felt no uneasiness when with the oxygen respired was mixed a certain proportion of carbonic acid. At 8,800 metres the addition of oxygen alone was of no effect; the operator was absolutely ill and on the point of losing consciousness. The assistants hastened to introduce carbonic acid in the mixture which he respired, and immediately the sensations of vertigo disappeared and the head pains ceased.

An Alpine incident seems to support the theory of the learned Italian physiologist. Two parties of tourists, together forty-five persons, were surprised by a storm on Monte-Rosa, and took refuge in a cabin which had been one of the laboratories of Dr. Mosso, the Cabanna Regina Margharita, at 4,000 metres altitude. This hut, hermetically closed by sheets of copper, was only a cube of fifty-eight metres. The air could only be renewed by two small windows, partially opened, and by the draught of two stove pipes. The atmosphere of the cabin was consequently overcharged with carbonic acid, yet none of the party suffered uneasiness. On the plain, in similar conditions, grave incidents must have occurred. The inference apparently is, that the rapid loss of carbonic acid disarranging the physiological equilibrium may be the principal, and probably the sole, cause of *mal de montagne.*

"CURE DE MONTAGNE."

Just now more attention is being given than in recent years to the benefits derived from prolonged sojourn in mountain resorts, either of moderate elevation, *e.g.*, from 1,250 to 3,000 ft., or Alpine climates (altitudes 3,000 to 7,000 ft. or more). These climates are claimed to have an eminently tonic and reconstructive action on the human organism, giving activity to all its functions, an action becoming more energetic as the altitude increases. According to Dr. Möller, the principal physiological effects of a sojourn in high altitudes are the production of a kind of gymnastic *respiration* and *circulation,* and the augmentation of the excretion of carbonic acid and moisture by the organism, simultaneously with a stimulating action on the skin and the nervous system, the superiority of these effects, as a therapeutic means, being their *continuity* (without any interruption, and without even being noticed) night and day, whether indoors or out of doors, whether with corporeal exercise or in repose, "the body being, so to say, immersed in a continuous air bath, always of the same tension and pressure."

Characteristic results of a mountain climate are the vigour it communicates to the locomotory system, and the rapid recuperation of the muscular powers. As Saussure remarked, "The simple cessation of movement (even without sitting down and within the short space of three or four minutes) seems to so completely restore the strength that we resume our ascent with an assurance of readily reaching the summit."

The Alpine atmosphere especially appears to most favourably affect the nervous system; the calm and restorative sleep here enjoyed correcting the nervous restlessness, thus sensibly reducing, if not curing, the neurasthenia which is so prevalent and so prominent a feature in modern pathology.

In *La Medecine Moderne* (March, 1893), Dr. de la Harpe, of Lausanne, states that high altitudes act beneficially:

1. By the lower temperature rendering the summer heat more tolerable.
2. By the energy of the sunlight, the solar rays having (in addition to their calorific action) a chemical action as marked on the animal as on the vegetable organism.
3. By the *dryness* of the air.
4. By the *purity* of the air, almost absolutely free of dust and microbes.
5. By the diminution of atmospheric pressure, which increases the number of blood-corpuscles, thus promoting circulation and nutrition.

To fairly test a *cure de montagne* it should be taken seriously and methodically; not, as nowadays so usual, rushing rapidly from one altitude and atmosphere to others. To be efficacious a mountain-cure requires a continuous residence of two or three months at about the same elevation; not going higher to-day and descending to lower atmospheric conditions to-morrow. Select an altitude and surroundings considered by competent medical authorities most suitable for the individual case, and remain under approximately the same atmospheric conditions for the prescribed period of "cure."

Formerly the inns and hotels in the highlands were far from being inviting for a long stay, their *cuisines* and sanitary arrangements being anything but beneficial for the delicate or the invalid. Now this is all changed; English home comforts and agreeable environments can be easily found at almost any altitude.

In Tyrol, as an *alpestre* sojourn, Innsbruck is much recommended, having an altitude of over 1,900 feet, very equable climate, Italian skies, sheltered position, university, theatre, large library, fine churches, English services, military music, and the advantages of a city residence, with an hotel, "The Tirolerhof," long and deservedly popular for its English comforts.

In the Berner-Oberland are various stations, *alpestre* and Alpine, and very good hotels for a prolonged visit—at Interlaken the Rugen Hotel, about 1,900 ft. altitude, and conveniently adjacent to the Kleine-Rugen Forest promenades; at Murren the Grand Hôtel des Alpes, 5,400 ft. altitude, face to face with the beautiful peaks and glaciers of the Jungfrau range.

The neighbourhood of the Lucerne lakes offers abundant choice of both *alpestre* and Alpine stations. The town of Lucerne itself, of 1,440 ft. altitude and most readily accessible from England, is a veritable "city of hotels." Pre-eminent among them the well-known palatial "Schweizerhof," and under the same genial proprietorship the adjoining family house, "The Luzernerhof." Lucerne has also the advantages of good shops, churches, museum, library, casino, theatre, races, tennis tournaments, and many other spring, summer, and autumnal amusements, to which will soon be added golf links.

At the same altitude, at Vitznau, on the Lake, is the handsome new "Vitznauerhof," picturesquely located, with gardens, wooded walks, and lake baths.

At 2,100 ft. altitude is the well-known and favourite Grand Hôtel Axenfels; and at 2,360 ft. altitude the Grand Hôtel Axenstein, elegantly rebuilt on the spot our late Queen described as most lovely.

Nearer Lucerne, and now accessible from the town by frequent trams and funicular, is the Grand Hôtel Sonnenberg, 2,350 ft. altitude, with extensive grounds and fine forests, and from its roof one of the best views of Swiss scenery.

On the celebrated Rigi, but pleasantly away from the rush and crowd of summer-trippers, is the home-like and comfortable "Hôtel Rigi-First," 4,800 ft. altitude.

For an Alpine cure Zermatt offers many facilities, as the same *hotelier* family, the Seilers, have various hotels at different altitudes; each of them excellent, although of different characteristics, so as to meet the desires and requirements of every description of guest. In Zermatt village, 5,300 ft. altitude, they have three capital houses, "The Mont Cervin," "The Mont Rose," and "The Zermatterhof." Higher than Zermatt village, they have the "Grand Hôtel Riffelalp," 7,000 ft. altitude, and unsurpassed in Europe as an Alpine residence; and also two smaller hotels, highly esteemed by artists and naturalists, on the Riffelberg and at Lac Noir, each about 8,500 ft. altitude.

To those who winter in the Riviera, and who may prefer to avoid the tedium of travelling to and fro, the Maritime Alps can now afford a very desirable mountain summer and autumn home at Thorenc, four hours' drive from Grasse, amidst pine forests at an altitude of 3,600 ft. Here is the "Grand Hôtel Climatérique," under the able management of Mr. Rost, the popular proprietor of the Grand Hôtel at Grasse.

Grasse itself, being 1,100 ft. altitude, also offers an intermediate resting-place, with an air remarkably pure and tonic, between the Mediterranean level of Cannes and Nice and the higher atmosphere of Thorenc, or of the Savoy and the Swiss Alps.

The Operating Theatres.

KING'S COLLEGE HOSPITAL.

OPERATION FOR TWISTED COLON.—Mr. PEYTON BEALE operated on a man, æt. about 30, whom he saw at the hospital, and whose history was narrated to him as follows:—The man about ten days previously had been for a long bicycle ride on an empty stomach; on his return he had hurriedly eaten a meal and immediately complained of pain in the epigastrium; this was soon followed by considerable distension, chiefly at the upper part of the abdomen—this was supposed to be stomach, and stomach tubes were passed, the organ being washed out; a considerable amount of flatus escaped during this proceeding, but the distension was very slightly diminished. The patient had been admitted to the hospital two days before, being seen by Mr. Beale, and by that time his bowels had not acted for eight days. There had been no elevation of temperature, but the pulse had latterly become small and running, the countenance pinched, but no vomiting had occurred. The case appeared to be one of volvulus of the large intestine. The following operation was performed:—An incision about six inches long was made in the middle line, having the umbilicus as its centre; the transverse colon was seen to be enormously distended, being eight inches in diameter. On passing the hand into the abdomen and following the ascending colon downwards a constricting band was felt, and at first was thought to be encircling the gut and so obstructing its lumen, but on further investigation this band appeared to be arranged spirally, so that the finger slipped down by its side much as a person passes down a spiral staircase having a central support. It was thus evident that the colon was twisted, and on further examination it was found that the whole of the ascending, transverse and descending colon was twisted twice round the cæcum, and the sigmoid acting as the fixed part. The twist was unravelled by bringing the whole colon out of the abdominal wound, and then, an assistant's finger being placed in the patient's rectum flatus and fæces were found to escape freely, thus proving that the obstruction had been entirely removed. The colon was returned, and the abdominal wound sutured. Mr. Beale remarked that although a volvulus or twist of some part of the colon is often met with, he had never seen one in which the whole loop of colon had been twisted as in this case, and he assumed that the twist must have been of old standing, leading to partial obstruction which had become complete either after sudden and violent exercise, or as the result of a heavy and hasty meal being taken immediately after that exercise. The only difficulty experienced in the operation, he said, was in getting the enormously distended colon out through the wound without injuring the omentum between it and the stomach, this being, of course, twisted also. The actual seat of obstruction, he pointed out, could not be seen, and so the first impression on feeling it was that produced by the presence of an internal hernia. The difficulty in all these cases of complete obstruction lasting for more than a few days, he thought, was that it led to paralysis of the intestine, this paralysis frequently causing death. He had found that in such cases the administration of a large dose of calomel as soon as the patient had recovered from the anæsthetic was in some cases beneficial, though it was decidedly risky, but a small dose seemed to be quite ineffectual in this condition. He had tried massage and electricity in cases of paralysed intestine after the strangulation had been relieved, but had not found either to be of any use. The stomach symptoms, he said, were probably due to tension upon its greater curvature owing to the twisted omentum, otherwise the case was a fairly typical one of complete obstruction not due to the presence of a new growth or of an inflammatory process.

Boracic Acid in Milk.

A MILK dealer at Manchester was fined last week for selling milk which contained four grains of boracic acid to the pint on the ground that the milk was no longer of the nature and quality demanded.

A Pathological Scholarship.

MR. J. FRANCIS MASON, of Freeland Lodge, Woodstock, Oxfordshire, has, through Dr. Caverhill, of Edinburgh, offered a scholarship of £200 a year, with extension to two or three years if the work seems to promise good results, for the purpose of carrying on investigation into the physiology and pathology of the thymus gland, including, if necessary, collateral investigations on the other ductless glands. The founder of the scholarship has asked Dr. Caverhill and Professor Woodhead to assist him to select a suitable candidate. Preference will be given to those who have already made a study of the thymus or other ductless glands, or have given some evidence of their fitness to carry on this or similar work, and who will devote the whole of their time during their tenure of the scholarship to the special research mentioned. Every facility for carrying on this work in the Pathological Laboratories, Cambridge, will be placed at the disposal of the scholar.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, AUGUST 27, 1902.

CIVILISATION AND THE BIRTH-RATE.

We have been invited to gauge the civilisation of different countries by the quantity of soap they use, the miles of paper consumed in newspaper production, and in various ways which are simple if not absolutely trustworthy. We may add another factor to the arithmetical calculation, viz., the birth-rate, which slowly but surely diminishes in proportion to the advance of the community along the path of civilisation. We find, for instance, that during the twenty years ending 1895 the birth-rate in Germany fell from 42 to 36, and in England from 36 to 29. In France, a country in which what may be termed the civilised birth-rate was long since reached, the fall is less perceptible, amounting only to ·8 per cent. (26 to 25·2). The increased cost of living does not account for the decrease, since, although the cost has tangibly increased, a far greater change has taken place in respect of the standard of comfort. Young people are no longer content to wed under conditions which satisfied their predecessors, and they are gradually acquiring a degree of self-control—in regard to marriage—which enables them to await more auspicious circumstances. Then, too, the general intelligence undergoes development, and possible bridegrooms, no doubt, take into consideration the question of providing for their offspring, and it cannot be denied that the cost of educating children up to the present standard, low as it is, imposes on the parents burdens previously unknown. Moreover, the period of education and technical training is longer in proportion to the heightening of the standard. The wealth of a nation, especially when fairly equally distributed, as is the case in France, and as it is notoriously not the case in this country, tends to restrict fertility; in other words, the richer the individual becomes the more foresight does he develop and the less will he leave to chance. In countries where the working classes are, intellectually speaking, still undeveloped, the marriage and birth-rates are determined, to a great extent, by fluctuations in the price of bread, the rate of interest, and a thousand other economical conditions which exert a direct influence on the cost of living. In nations of higher intellectual development such material circumstances are of vastly less import, restricted fertility being due to influences of psychical origin. Another circumstance which cannot but have a powerful effect on the inclination to marry is the gradual emancipation of woman. Hitherto marriage has in great measure been the only "occupation" for which women were trained and for which they were in any sense fit. Thanks to the more general employment of women in various capacities they have been enabled to conquer an independence which many of them, we may be sure, will prefer to the joys of maternity and the responsibilities which they entail. Moreover, the very fact that women now enter openly into competition with men in walks of life previously restricted to the latter tends to reduce the number of possible husbands by reducing the sum total of salaries earned by them. In spite, however, of all the specious explanations which are forthcoming to account for this universal tendency to postpone the date of marriage and thus reduce the period of child-bearing, one is driven to the conclusion that physical conditions are of comparatively little moment in determining the movement. The interests of the nation are here at variance with those of the individual, and, as it is the individual who decides the matter, he is likely to decide it in accordance with his own views as to what is best for him. The injunction to increase and multiply no longer applies to older nations where the labour market is overcrowded and where a large proportion of the population live on the verge of starvation in an abyss of ignorance and dirt. A smaller birth-rate may introduce new and altered conditions into our social system, not necessarily of a kind detrimental to a high standard of general well-being, and when the surplus population is reduced to a great extent the nation will be less disposed to sacrifice lives in destructive wars. The conclusion to be drawn is that there is no physiological basis to the diminished birth-rate, since it is dependent on causes well within our control, individually, though not collectively.

THE ÆTIOLOGY OF TYPHOID FEVER.

The ætiology of typhoid fever will for long remain one of the most interesting of medical problems. Since Eberth, in 1880, discovered the bacillus that is known by his name, little progress has been made on the subject. That the bacillus is the toxic agent has, we believe, been demonstrated; but it yet remains for us to learn the conditions under which the bacillus developes its toxin. Some progress has, however, been made; we have come to the knowledge that the Eberth bacillus, when passed in the liquid fæces of a patient, is innocuous, and remains so for some time. It has also been ascertained that its vitality is great, and that typhoid fæcal discharges are not rendered aseptic by being buried in the soil. Indeed, recent investigations go to show that such a method of disposing of typhoid dejecta is about the most dangerous that could be adopted. When the bacilli-charged stool is poured into the earth, the bacillus quickly acquires its uncharacteristic properties and soon makes its way to the surface of the soil, where the fæcal impregnated soil has furnished the *Musca domestica* a suitable resting place. At this point medicine awaits the aid of the bacteriologist to learn the life history of the Eberth bacillus. From clinical observations it seems probable that in the earlier metamorphoses of the bacillus, in what we may call for convenience sake the spore stage, the miniature bacillus may be inhaled and make its way through the pulmonary tissues. That typhoid is usually water-borne may hold good for large cities, but it altogether fails to explain the prevalence of the disease in hot, dry countries, or in camps of modern armies where the water is sterilised by boiling. The statement that in camps soldiers prefer to drink contaminated water and take the risk of typhoid rather than use the sterilised water is to charge them with an absence of common sense. We view the outbreaks of the fever difficulty. We consider that in hot climates the dust storms and dust laden air not unfrequently carry bacilli spores, which will account for a certain percentage of cases, not a large percentage. In camps the common house fly is the principal agent in disseminating the poison. The latrines of the soldiers and the stools of the hospital patients are the feeding places of the flies, and the dejecta of one patient affords sufficient material to infect a thousand. The warmth of the tents and hospitals attracts the flies, and the milk, meat, and indeed all the food on the premises, become infected. This source of infection is the great danger of typhoid fever in a farmhouse from which milk is supplied, either direct to families or to creameries. The active part that the house fly plays in producing epidemics of typhoid it was impossible to judge of until Dr. Packard, of Boston, 1874, made known its life history. We are too much given to formulate our opinions on disease from facts ascertained in this country without taking into account the course the disease runs elsewhere. How different the conditions under which typhoid occurs in Australia, and how dissimilar the symptoms. We have no explanation of the immunity of the native of India to the disease. He drinks notoriously unclean water, he suffers from such filth diseases as cholera and plague, and from a form of relapsing fever, with purging, and although the European resident gets typhoid, he goes free. Neither in this country nor in France has the disease during the last two decades of the nineteenth century been so typical of the classic descriptions of Louis and Jenner than it was. It is, however, satisfactory to recognise that we can by sterilising typhoid stools immediately they are passed do much to stamp out the disease. To secure this very desirable object the antiseptic should not be a volatile one, for all antiseptics of that nature, such as carbolic acid, and admixtures of the creoline series, are practically useless; the antiseptic volatilise and the period of suspended animation of the bacillus passes off, and he acquires his virulence and activity in undiminished amount. A trustworthy antiseptic in such cases is a solution of pure sulphate of copper, which should be poured into the night chair immediately before the patient defæcates. The copper salt not alone sterilises the stool, but is a poison to flies. We have also learned the necessity of keeping all food under gauze or other covers, so that it may not become infected. But until we know the life history of the bacillus our prophylactic measures will be incomplete.

MODERN ASPECTS OF DENTAL SCIENCE.

THE progressive nature of medical science is well exemplified in its off-shoot of dental practice. Some of the wider aspects of that most necessary branch of study have sprung directly from the comparatively recent discoveries of bacteriology. Perhaps the most striking application of the new knowledge has been made by Dr. Hunter, who has shown that various forms of anæmia are due to septic conditions of the oral cavity. The recognition of the important fact that chronic mild septicæmia and ill-health may arise from carious teeth opens up at once a wide field both of prevention and of rational therapeutics. That theory marks an immense advance upon the old-fashioned attitude which limited the damage to health arising from bad teeth simply to lessened powers of mastication. The whole subject was recently dealt with in an interesting manner by the President of the Western Branch of the British Dental Association, Mr. Greatrex Yates. He contended that the question was one of the widest national importance. The ravages of dental caries, he said in so many words, threaten to become a national problem which must sooner or later be dealt with by the State, if we are to maintain our position as the foremost nation. The disease and the loss of teeth mean the loss of energy, ambition, and many of the attributes for which our race is held famous. The importance of this general principle has been officially recognised in the standard of soundness of teeth now enforced in the case of recruits for the Services. In the recent South African war, we are inclined to think the test was pushed to an extreme. The presence of one or two carious teeth in a man of otherwise good physical qualities can surely have little effect upon his health during a short service campaign. The effect of bad teeth upon the general constitution is likely to be an extremely slow process, especially in persons who at the outset are robust. At the same time we are fully in accord with Mr. Yates's general proposition, and we heartily support his contention that all State schools, asylums, and Services should be under systematic dental supervision. It has been asserted on good authority that a systematic examination of the teeth of school children at home and abroad — in the countries of Europe, Canada and the United States — has revealed the fact that from 90 to 95 per cent. have defective teeth. There is a good deal to be said in favour of the contention that prisoners should be entitled to claim skilled dental service. On one point we emphatically agree with Mr. Yates, namely, the need of greatly extended facilities in the case of the poor. A glance into the mouth of the average dispensary patient reveals a septic condition that probably accounts for a considerable proportion of the ailments for which relief is sought. To attempt to cure dyspepsia without first securing a healthy mouth is to treat a symptom while ignoring its most probable cause. The thanks of the medical profession are due to the excellent pioneer work that has been so long and faithfully performed by the more scientific members of the dental profession.

Notes on Current Topics.

Anti-Tuberculous (Bovine) Immunisation.

Von Behring's report, which concentrates the essence of the results obtained during seven years systematic investigation of bovine tuberculosis, conducted by himself and his associates at Marburg, is now the property of the curious and expectant public. It contains proof of a decidedly affirmative reply to the question which he himself proposed: "Is it now proven that individuals of the bovine family can be voluntarily immunised against tuberculosis, so as to be able to withstand infection with a virus which is fatal to control animals?" Accordingly, we have here, as one of our trans-Atlantic contemporaries puts it, "a brilliant discovery in animal therapeutics reflected across an immeasurable field in human therapeutics." Von Behring directs attention to the want of any very striking morphological and cultural variation; to the identity of the anatomical and bacteriological findings after experimental inoculation of guinea-pigs and puppies; to the successful inoculation of cattle with tubercle bacilli derived from human hosts; to the possibility of immunising cattle against bovine tuberculosis by means of the virus of human tuberculosis. "Furthermore, the results of chemical analysis favour the notion of chemical unity and strengthen the foundations of the theory of bacteriological unity." These are facts and arguments which strongly appeal to the critical and argumentative powers of Professor Koch, who still appears to hold so strongly to his hypothesis of the duality of human and bovine tuberculosis. Reverting to the subject of preventive (bovine) inoculation against tuberculosis, it is both instructive and interesting to note that the method of inoculation practised by von Behring is similar in principle to that of vaccination, rather than to the preventive inoculation employed in diphtheria or tetanus. And the immunisation so obtained is ascribed to an alteration in the biological condition of the animal, due to the infection to which it is artificially subjected; and is not attributable to the presence in the organism of a substance separable from the veins. "It is an isopathic self-immunisation, in contradistinction to an immunisation by anti-bodies possessing antitoxic or anti-bacterial properties." Von Behring has satisfied himself, and his procedures seem perfectly satisfying to an unprejudiced critic, that he has produced a virus by means of which unprotected cattle can be caused to die of acute miliary tuberculosis in a reasonably brief period; and that he has prepared a weakened virus which has a saving power against the deadlier microbic poison. We feel sure that all our readers must look forward, as we do, with curious and anxious expectation for the final adjustment of the contending hypotheses now held by such eminent and earnest scientific inquirers as Koch and von Behring. In the interests of suffering humanity, the sooner the truth is finally established regarding this truly tremendous problem the better. We must also remark, in closing, that even if Koch's hypothesis came to be finally established, the results of von Behring's investigations, which have given a result so colossal as the power of preventing tuberculosis in cattle, will still retain a vast and perennial value for the human race throughout the whole civilised world.

Death of Dr. Schenk.

The death is announced of Dr. Leopold Schenk, formerly Professor of Embryology and Physiology at the University of Vienna. Dr. Schenk achieved notoriety, if not fame, by his work on the possibility of determining the sex of the fœtus by regulating the diet of the mother, an hypothesis which bore no evidence on the face of it of being based on careful scientific observation. It obtained forthwith a world-wide *succès de curiosité*, but the manner in which the alleged discovery was made public aroused the resentment of his University colleagues to such a pitch that Dr. Schenk was compelled to resign his chair, *noblesse oblige*, and a man of science who has attained to the dignity of a professorship owes it to his colleagues and to the institution to which he belongs to abstain from pandering to the gallery by promulgating ill-digested and scientifically unconfirmed theories.

The Treatment of Hæmorrhoids.

To the many operative measures for the treatment of piles, Potarca, the Roumanian, has added another. It might, however, be more accurate to say that he has adopted the principle of Whitehead's operation and modified the procedure in a most ingenious manner. Having anæsthetised the patient, he inserts a wooden cylinder, three or four inches long and from an inch to an inch and a-half in diameter, into the rectum. To allow of the cylinder being the more easily retained it is made a little thicker in the middle than at the ends, and it is provided with a copper handle. The second stage of the operation is now commenced by passing a circle of pins through the muco-cutaneous surface at the anal orifice and pressing them into the wooden cylinder. Then, by partially withdrawing the cylinder, the anal aperture is made to bulge, after which a circular incision is carried around it, just outside the pins. A dissection of the external sphincter, exposing the rectal mucous membrane and dilated veins, is then made and the veins are ligated or excised. The cylinder is now pushed back, and the wound sutured. In old-standing severe cases the incision is carried down to the cylinder, and all the mucous membrane between the pins and the cutaneous surface removed, the healthy mucous tissue being drawn down and sutured to the cutaneous tissue. The operation is easy of performance, and is well suited for cases of hæmorrhoids, complicated ulcers, and fissures.

Ethyl Chloride as an Anæsthetic.

The most recent claimant for favour as an agreeable and safe anæsthetic is ethyl chloride. It is a colourless mobile liquid having a peculiar and pleasant odour and a sweetish burning taste. The compound was first discovered by Basil Valentine, by mixing the spirit of common salt with spirits of wine and distilling thrice. In 1848 Glauber rediscovered the salt, "a fine, clear *oleum vini*" swimming on the top, "which is not the least potent of cordials." From its chemical formula, $C_2 H_5 Cl$, it should be equally safe as ether, even though one death in a series of 2,500 anæsthetisations took place at Innsbrück, under Dr. Lothersser's care. By using a closed mask anæsthesia is quickly produced, and there is no unpleasant after-effects. It has, however, many drawbacks; the anæsthesia is never complete, struggling usually occurs, and the muscles are not relaxed as in chloroformisation. Patients no doubt pass quickly under the influence of the drug, but they recover quite as quickly from its effects. Uncertain in action, evanescent in its effects, and without power to relax the muscle tissue, we cannot see that the chloride is a valuable addition to the list of agents for producing transient anæsthesia.

Heredity in Crime.

The record case to use in illustration of heredity in crime has long been the complex one supplied by the history of the famous "Jukes" family—which was made the subject of a monograph by R. L. Dugdale:—"The Jukes: A Study in Crime, Pauperism, Disease, and Heredity," which was published in 1877 by Putnam's, New York. The ancestor of this family of gloomy celebrity was born in an approximately inaccessible locality in the State of New York, in the third or fourth decade of the eighteenth century. He was a descendant of early Dutch settlers; and lived the life of a backwoodsman—hunting, fishing, loafing, drinking, &c., by fits and starts. This is the mode of life to which the instinctive criminal naturally gravitates. He left a numerous issue, of which a large proportion was illegitimate. Two of the sons married the "Jukes" sisters—probably illegitimate. There were five of the "Jukes" sisters; and, of their numerous descendants, 709 have been traced—occupying a period of five generations. Of this large number there was a certain proportion of honest workers; but it has been "on the whole a family of criminals and prostitutes, of vagabonds and paupers." There were 76 convicted criminals, and, of the females, 52·40 were prostitutes; the normal average has been estimated at 1·66 per cent.; 180 had received out-door relief during an (approximate) aggregate period of 2,300 years. Dugdale estimates the total cost to the State, during 75 years, at a million and a quarter dollars. Of the men, not 20 were skilled workmen; and 10 of these had learned their trades in prison. Mrs. M. J. Annable, State Superintendent of the Rescue Work of the Women's Christian Temperance Union, New York, has discussed the same subject in the *Boston Medical and Surgical Journal*, and gives the essence of the family history of a woman—the keeper of a house of ill-fame—who died in 1827, at the age of 51. Her descendants have been numbered at 800, of whom 700 have been convicted at least once. There were 342 drunkards, 127 women of immoral character, and 37 murderers—all of whom have been executed. So that the descendants of that one woman have cost the State 3,000,000 dollars—for trials, imprisonments, and executions!

Malta Fever.

It is, of course, well known to travelled medical men that Malta fever is not confined to the island of Malta; it is of common occurrence on the shores of the Mediterranean, though it is endemic in the island of Malta. Indeed, Manson states that "it is highly probable that the same or a similar fever occurs in many parts of the tropical world, having been confounded hitherto with malarial fever." And Major Semple, Director of the Pasteur Institute, Kasauli, affirms that "it is not uncommon in the Punjab, and especially up about the frontier, while there have been several cases in Simla lately, and some in Delhi, Agra, and Allahabad." It is also known by sundry synonyms: "Mediterranean Fever," "Rock Fever of Gibraltar," "Neapolitan Fever," and "Undulating Fever." In 1887 Surgeon-Major Bruce announced the discovery of the specific organism of the disease, which he had obtained from the spleen by cultivation, and which "he established as the causal agency by inoculating monkeys with the culture." The infected monkeys died—from the thirteenth to the twentieth day. Accidental inoculation of the human subject with a culture has also resulted in the production of Malta fever. The period of incubation appears to vary from about six to fourteen days, and the mortality is about 2 per cent. The varying symptoms in different cases have suggested the division into three types: *malignant*, where the onset is sudden, with intense nervous prostration, and a temperature of 104°-105° for some days; *undulatory*, said by Hughes to be the commonest, when there develops a temperature resembling that of typhoid, with a tendency to numerous relapses—each relapse lasting about ten days; *intermittent*, in which the temperature rises every day about 11 a.m., and gradually falls after midnight to normal, or nearly so. The frequency of occurrence is greatest in the driest months of the year, reaching the maximum in July.

A Drawback of Lady Doctors.

One drawback incidental to the practise of medicine by women is the unconscionable time they require to respond to a night call. A man jumps into his dressing grown and trips lightly down the stairs, twisting his moustache into shape as he goes. The woman doctor, on the other hand, has to go through numerous solemn rites before she dare show herself in public, and it may well happen that the time consumed in this, femininely-regarded, indispensable preparation appears to the sufferer and his friends to be unduly long. Only last week, at an inquest held in South London on the body of an unfortunate girl who had sustained fatal injuries as the result of her cycle skidding and throwing her under an omnibus, the indignant father complained that she had been left twenty-five minutes without attention at the infirmary, a delay which was ascribed to the fact that the medical resident at the infirmary was a woman, who, "of course," took somewhat longer to dress than would a man. In the opinion of the jury, this is a sufficient reason for always keeping a medical man on the premises, but it appears that the guardians do not offer sufficient remuneration to induce a medical man to reside in the infirmary. If women are to hold their own in medicine they will have to discover a means of obviating this and sundry other drawbacks incidental to their sex.

Leucocytes and Diagnosis.

The importance of a microscopic examination of the blood in the estimation of both red corpuscles and white is coming to be more and more recognised, not only in diseases of the blood, but in those of a general nature. In many undefined cases it is found that the point of diagnosis is immediately cleared by a blood examination. Thus, in typhoid fever, lymphocytosis is the rule, while leucocytosis is stated never to occur unless there is some complication. As the latter is the rule in most infectious diseases and inflammatory conditions, the value of the distinction is obvious, more especially as the lymphocytosis in typhoid occurs early, along with a leucopenia, some time before the Widal reaction is established. An examination of the blood is stated to distinguish at once a case of early typhoid from one of pneumonia or influenza. Again, a marked leucocytosis occurs in such conditions as appendicitis, pyosalpinx, and suppurating ovarian cysts, thereby distinguishing them not only from typhoid but from malaria, in which leucopenia is the rule. And not only in the early stages of disease is the condition of the leucocytes of assistance, but during its progress any marked increase or diminution in their number points to some change of importance in the patient's system. Thus, a sudden leucocytosis in typhoid very frequently points to a perforation. The whole subject is very well summarised in a recent paper by Dr. Brown, of Baltimore (*Medical News*, July 26th) who quotes two cases in which a sudden increase in the number of leucocytes from about seventeen to thirty-four thousand per cmm. synchronised with a perforation of the appendix.

The Registration of "Unknowns" at Hospitals.

The unfortunate occurrence in connection with a case "unknown," admitted into the Great Northern Hospital, has drawn attention to the importance of the identification of patients. We believe this is generally recognised by all hospitals; and resident medical officers are usually freely alive to the necessity of securing the names and addresses of those who bring cases to hospital, and, where the services of the police have been called in, the number of the Law's representative is, we believe, generally taken. It would be well that all house surgeons and house physicians should be notified of the need for ensuring that this formality is attended to.

The Ætiology of Alpine Accidents.

The annual invasion of the Alps demands heavy toll of human lives. The losses this year are startlingly heavy. Much of the sacrifice is needless. Many deaths occur from preventable causes. The ætiology of alpine accidents calls for serious study. A Swiss medical man has sought to throw light on this matter. The results of his researches have recently been published in the reports of the Swiss Alpine Club in Berne. His studies cover ten years—1890-1901. During this period 305 have lost their lives, of whom 218 were tourists, 73 guides, and 14 porters. As regards nationality, 190 were Germans, including Austrians, 48 Swiss, 23 Italians, 18 English or American, and 15 French. Mountaineering is scarcely taken seriously nowadays. The number of climbers to the summit of Mount Cenis in the course of a year is about 8,000; 1,000 fewer ascend Niesen, and 6,000 reach the peak of Raxalpe, in Austria, while 420 succeed in reaching the top of Wilde Kaiser, and 120 that of Mont Blanc. Sometimes as many as twenty climbers start for the Wetterhorn and Mont Rosa on one day. It is computed that in a year 78,000 visit the German-Austrian Alpine region, while 22,000 tour in Central or West Alps, making a total of 100,000. A large proportion of these climb more or less, but only twenty-seven on an average lose their lives every year. There are many factors in the causation of these accidents—foolhardy adventurousness, vanity, the spirit of emulation, carelessness, want of experience, absent-mindedness, parsimony. It is also shown that many accidents have been caused by the use of alcoholic drinks. In twilight, and during misty weather, and, of course, at the time of storms, dangers are peculiarly liable to be entered into without adequate means of escape. In spite of all hazards the lure of the mountains cannot be overcome, and mountaineering is not likely to diminish in popularity, but it is most desirable that climbers should enter on their pursuit with knowledge and judgment.

The Use of Supra-Renal Extract in Bladder Surgery.

THE vaso-constrictor properties of supra-renal extract are coming to be so well known that every addition to the uses to which they can be put is of importance. Von Fritz, at Vienna, has lately called attention to the value of this extract in cystoscopy, in the case of patients who suffer from vesical hæmorrhage. He states that 100 to 150 c.cs. introduced into the bladder and left there for three or four minutes check all hæmorrhage temporarily, and allow the operator to obtain an uninterrupted view of the mucous membrane. Similarly, the removal of small neoplasms of the bladder is greatly facilitated by a preliminary use of supra-renal extract. Fritsch further states that the passage of a catheter, in cases of tight stricture or of a large prostate, is considerably facilitated by the preliminary injection of the extract into the urethra, a result which he explains as being due to the anæmia of the mucous membrane which is induced. The risk of the recurrence of hæmorrhage in the case of a removed growth after the effect of the extract has passed off must not be forgotten, and means must be taken to prevent it. Fritsch records one case in which such an accident happened.

A Cure for Red Noses.

SOME unfortunate persons suffer from a tendency to redness of the nose, due to fugitive erythema which supervenes under slight causes, either internal or external. A Berlin physician, not improbably a sufferer himself, announces that this ephemeral but distressing condition may be cured by the application of benzine. He applies it on a folded piece of lint, which is kept in contact with the erythematous area for a few seconds, carefully avoiding any friction of the skin. If the application be repeated a few times the skin covering the nose becomes paler and less shiny. The benzine application may even be used as a prophylactic, so that persons whose noses are liable to vie in hue after dinner with the red, red rose can avert the calamity by including benzine among their cosmetic appliances.

The Antiseptic Properties of Perfumes.

THE search for a new antiseptic still continues to occupy the attention of many observers. Paradoxical as it may seem, the latest additions to the list are in reality the oldest of all. The researches of an Italian, M. Calvello, at Palermo, into the antiseptic value of various spices and fragrant plants show that essences derived from these substances, and dissolved in six parts of alcohol, form, when added in different proportions to water, antiseptics which compare favourably with corrosive sublimate solution of the usual strength. Essence of cinnamon is perhaps the most satisfactory, then come essence of thyme and essence of geranium, and, lastly, essence of patchouli. Essence of cinnamon, when used at a strength of 7 or 8 per cent., gave the same results as corrosive sublimate lotion at a strength of 0·1 per cent., while thyme at 11 per cent. and geranium at 17 per cent. were similarly comparable. For absolute sterilisation, it was found necessary to increase the strength of cinnamon to 9 per cent. and of thyme and geranium to 12 and 18 per cent. respectively. Patchouli was far weaker in its antiseptic properties, and even at a strength of 50 per cent. was untrustworthy. In testing the potency of the various essences the hands were immersed in them for five minutes.

A Cemetery Scandal.

THE inadequate nature of the death registration laws has been repeatedly before the public during recent years. It seems incredible that the cemetery authorities will accept bodies for burial without receiving proper official certificates from the undertaker. Such laxity would clearly pave the way to the easy disposal of bodies of persons who have been murdered. It seems, however, from the evidence given at the West Ham Coroner's Court last week, that the Plaistow Cemetery authorities are prepared to inter bodies without any burial order, subject, presumably, to the condition that if the certificate be not forwarded within a week the coroner must be communicated with. Two bodies were removed from the mortuary of St. George's-in-the-East Infirmary under such circumstances, and as they were awaiting inquest, and there was some doubt as to the cause of death, their exhumation was ordered. It was then found that the bodies were removed from the mortuary after an inquest had been ordered by the coroner. The explanation given was that the ordinary gate porter, who looked after the mortuary, was away on his holidays. The excuse appears hardly adequate for such a scandalous breach of duty and decorum. The law that can permit bodies to be buried without certification from a registrar obviously requires radical reform.

Death from Glanders.

LAST week a London carman died of glanders under circumstances that should have an educative value to the public. It seems that he worked for a coal merchant who had six horses, one of which died two months ago from so-called gangrene of the lung. In the light of the carman's death there can be little reasonable doubt that the horse died from glanders, although the owner and other witnesses at the inquest were confident that there had been no such disease in the stables. The London County Council inspector is reported to have said that gangrene of the lungs was getting very near to glanders. In this case we should have thought the two pathological conditions were identical. There is no disease that could be more absolutely detected by modern scientific measures, to wit, the mallein test. The systematic examination of all stables where horses have died from septic diseases would enable the Council to stamp out the disease, and, if required, compulsory powers could be readily obtained for the purpose. It is a national reproach that this loathsome and deadly, but readily preventable, disease should be allowed to linger on in our midst.

Age in Reference to Cancer.

A VERY brief study of cancer returns in respect of the age of the subjects makes it abundantly clear that, whatever may be the proximal cause of the affection, it is essentially a disease of advanced life. An examination of the figures seems to show that, although the total number of deaths from cancer has enormously increased of late, the increase is not due to there being a larger number of cases occurring in what may be termed the precancerous age, but to a greater number of cases, not necessarily a greater fatality, in the ages recognised to be liable to cancerous degeneration. Just as the proportion of infantile deaths from scarlet fever and diphtheria underwent a marked increase when small-pox was inhibited by vaccination, so the proportion of deaths from cancer increases now that a larger number of persons survive and reach an advanced life. It follows that cancer only attacks tissues the vitality whereof has been reduced by chronic irritation or constitutional decay, and this fact must render it all the more difficult to discover an effectual remedy unless the remedy at the same time comprises a means of restoring the vitality of the tissues.

The Toxicity of Boracic Acid and Borax.

IT is too generally assumed that boracic acid and its salt, borax, are free from toxic properties, so much so that milk dealers do not hesitate to introduce comparatively large quantities into their milk as preservatives, in ignorance or indifference to the possible effects on the consumers thereof. Dr. Herviault, of Rennes, in his graduation thesis, calls attention to the cutaneous symptoms which have been observed to follow the employment of boracic acid enemata. Such injections have, in a number of instances, been followed by erythematous eruptions commencing in the form of papules disseminated over a more or less extensive area. The eruption is associated with a rise of temperature, and is followed by well-marked desquamation. He notes that these symptoms subsided directly the enemata were suspended. Similar symptoms have been known to follow the use of boricated gargles, but so far as the enemata eruptions are concerned we are not satisfied that they were really due to the boracic constituent, since erythematous eruptions have often been reported as following the injection of fluid into the large intestine. It seems highly probable that the symptoms are due to the absorption of ptomaines from the intestine, such absorption being determined by the increase of intra-intestinal pressure consequent upon the injections.

Gastric Ulcer and Cancer.

IN regard to the origin of carcinoma of the stomach from the familiar chronic "round ulcer," it is asserted (a) that gastric carcinoma of such origin arises from the parts of the edge most exposed to mechanical irritation by the contents of the stomach, and, accordingly, that in the pyloric region such growth usually springs from the lower margin. This origin of pyloric cancer is said, moreover, to be very frequent, while less so, proportionately, in other parts of the stomach. Accordingly, early gastro-enterostomy is strongly recommended in cases where there is reason to believe that the puckering of an ulcer has commenced to narrow the pyloric orifice; and when the operation is not allowed by the patient, or is not thought advisable, the latter should chiefly use liquid, semi-liquid, and fatty foods. A special caution is given in respect of the ingestion of pieces of crust, of crisply toasted or fried portions of bread; also in the ingestion of carbo-hydrates. This is especially important in case of elderly people with few teeth and insufficient saliva. For such persons the use of taka-diastase is recommended as a digestive adjunct.

Luminous Microbes.

A NEW ray of light has suddenly flashed across the pathway of man's research in the domain of the obscure and unknown. The startling novelty of the fact in the present instance is that it has issued from the physical entity of man's greatest physical enemy—the microbe. We have for so many years been hearing of the deadly and death-dealing qualities and powers of bacteria in general, that we felt quite refreshed when we commenced to learn, comparatively recently, that some of these invisible enemies of ours performed some actually useful functions in our economy. And when we found it definitely stated—even proved—that their presence was *necessary*, not only to our well-being but to our very existence, we found that the full burden of the total ills of life was not, after all, so hard to bear as we had been accustomed to think it. The latest of their newly-ascertained properties turns out to be one of luminosity. Their radio-activity in this department has been found so energetic as to produce photographs, two of which are reproduced to illustrate a communication on this subject by Professor B. A. Gregory to the August number of the *Leisure Hour*. One is of a flask containing some of the luminous bacteria; the other, correspondingly appropriate, is of a portrait of their life-long enemy, Lord Lister. The latter required an exposure of several hours, so that there is no immediate prospect of bacterial luminosity becoming utilisable for the production of ordinary photography of the human face divine. The slowness of the action is due to the very interesting fact that, although the bacteria in question give out a copious supply of rays which affect the retina, their luminosity is peculiarly deficient in the special rays which affect the sensitive plate of the photographer. This is a striking example of the provident economy of nature. The emission of the invisible *actinic* rays would be of no functional advantage to those organisms; and, accordingly, none such are produced. They consume a certain amount of organic nutriment, together with a requisite proportion of oxygen; part of the energy so acquired is given out as light. The corresponding food and air used by human beings produce a certain proportion of heat: this maintains the uniform temperature of the body. Curious it is to note that the light emitted by the fire-fly has been ascertained to be of the same perfect character; there is no energy wasted in the production of invisible rays. Accordingly, we have the remarkable facts that the light produced by bacteria and by the fire-fly, respectively, are by far the most perfect known—so far as their amount goes in each case. In every known form of artificial illumination, the light rays are accompanied by a larger proportion of invisible ones—which necessarily means a great waste of energy. Nature does not squander her resources in that way.

(a) *Journal of American Medical Association*, July, 1902.

The Nostrum Fraud.

NOTHING seems too ridiculous or grotesque for a certain class of the population in the matter of nostrums. No matter how preposterous the statements may be, they are greedily swallowed along with the precious compound. Far from seeking to protect the poor and ignorant against the manœuvres of the unscrupulous host who prey upon their simplicity and credulity, the Government paternally gives them a quasi-official status by consenting to affix a stamp in exchange for a share of the plunder. Every week has its record of little victims who have succumbed, not necessarily to the remedy, since this is usually inert, but to the neglect of ordinary precautions under the empire of the confidence begotten of wholly mendacious assertions. A day or two since the Westminster Coroner directed attention to the "extremely dishonest" description published of a certain nostrum known as "Mother Job's Liquid Fruit," adding, according to the report, that the Government "made money out of dishonest advertising." The immorality of the medical stamp tax will one day, no doubt, be appreciated, but, so far, succeeding Governments have stifled all opposition thereto.

An Epidemic of Ringworm.

THE occurrence of a "small epidemic of *microsporon Audouini*" has been reported by Dr. Gunsett, of Strassburg. This type of ringworm forms between 80 and 90 per cent. of all the cases in this country, and 60 per cent. of the cases reported in Paris; but it is unusual in Germany and Italy, and is very rare in the eastern parts of Europe. Until two years before Dr. Gunsett's report, the *microsporon Audouini* was unknown in Strassburg; and during the intervening past two years there were but four cases reported. The recent small epidemic included seven perfectly typical cases. The scalp alone was affected. The patients were all boys, of whom the ages ranged between seven and nine years.

The Microbe of Beri-Beri.

AN outbreak of beri-beri, with several deaths, is reported to have taken place on a French vessel which arrived last week at Falmouth from Caleta Buena. This disease has been a mystery hitherto, and it is therefore interesting to note that Major Rost, of the Indian Medical Service, attributes it to an organism found in decaying rice and in liquors prepared therefrom. The ingestion of cultures of the organism is said to give rise in fowls to symptoms like beri-beri in man, but we should prefer some more definite information than this fancied resemblance before we accord this organism a scientific status.

Muzzling the Medical Staff.

FOR reasons which are not, to us, apparent, the Committee of Management of the Swansea Hospital have unanimously passed a resolution to the effect that the Annual Report of the medical staff shall not be published in future until and unless it has been submitted to the Board. The decision is likely to give rise to trouble, since the medical staff are the servants of the Governors and not of the Committee, and it is not easy to divine what object the Board has in view unless they desire, on occasion, to inhibit the publication of inconvenient facts.

THE P. and O. steamer *Arcadia*, which sailed last Thursday, takes out several medical men to reinforce the Indian Medical Service in the new scheme for staying the plague. Some thirty-seven practitioners have been selected for the service, and they will proceed to the Punjaub for the purpose of carrying out extensive inoculations.

MR. NORMAN HENRY FORBES, F.R.C.S.Ed., has been appointed a Knight of Grace of the Order of St. John at Jerusalem.

THE DUKE OF BEDFORD has signified to the hon. treasurer of the Cancer Research Fund, under the direction of the Royal College of Physicians of London and the Royal College of Surgeons of England, his intention to contribute £1,000 a year for three years to this fund.

MAJOR W. G. MACPHERSON, C.M.G., Royal Army Medical Corps, a member of the Army Medical Service Advisory Board, and of the Army Sanitary Committee, has been selected for service in South Africa.

Typhoid in Limerick.

A SERIOUS outbreak of typhoid fever is announced in Limerick city, the number of cases actually notified approximating forty. A L.G.B. inspector has been dispatched to inquire into the source of the mischief and to concert measures to prevent its further spread.

DR. JAMES MATTHEW CAW, who only arrived at Berwick last Tuesday to take charge of the local military hospital, was found dead on Saturday morning with his throat cut. He recently returned from South Africa.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

SCOTLAND.

[FROM OUR OWN CORRESPONDENT.]

NEW PROFESSOR OF ZOOLOGY FOR GLASGOW UNIVERSITY.

THE King has been pleased to approve of the appointment of Mr. J. Graham Kerr, M.A., of Christ's College, Cambridge, to the Professorship of Natural History in the University of Glasgow, vacant by the resignation of Professor John Young, M.D. Mr. Kerr was educated at the High School and University of Edinburgh, where he passed through so much of the earlier stages in the medical curriculum as had a direct bearing on Zoology, and acted as Demonstrator of Botany under Professor Bayley Balfour. After leaving Edinburgh Mr. Kerr became naturalist to an Argentine Government Expedition to the Gran Chaco, a little known region of tropical South America. The history of that expedition has yet to be written, but those who know it are aware of the part Mr. Kerr played in saving the remnant from utter disaster. It is characteristic of his enthusiasm and devotion to science that, although struggling for bare existence during the greater part of the expedition, which was deserted by its leaders, Mr. Kerr yet made collections and observations which have added to our knowledge of the South American fauna and flora. On returning to England in 1891, Mr. Graham Kerr went into residence at Cambridge, where he graduated, and has since been engaged in zoological research and teaching zoology in the University of Cambridge, where he holds the positions of senior demonstrator in animal morphology and examiner in zoology for the natural science tripos. He is a member of the Publication Committee of the Zoological Society of London, of the Council of the Cambridge Philosophical Society, and is President of the Cambridge Entomological and Natural History Society.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

OBJECTIONABLE ADVERTISEMENTS IN RELIGIOUS PUBLICATIONS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Two cases have lately been brought under my observation illustrating the effectiveness of the advertising bait of the infamous quack when displayed to the ingenuous reader in the columns of a religious paper—a subject dealt with briefly in one of your editorial notes of to-day, August 20th. A large number of this class of readers look upon the appearance of an advertisement in a respectable newspaper as a voucher of *bona fides*; and when, as they so often are, paid advertisements are inserted in the form of editorial paragraphs, with no sign to indicate that they are really paid puffs, written by the advertisers, they are doubtless the more effective in driving confiding sufferers into the hands of the quacks. One of the cases I refer to was that of a child, twelve years old, suffering from chronic middle ear disease of six years' duration—a case of deafness through evident destruction of the organ of hearing, and amenable to no treatment affording the faintest hope of restoration of function. Attracted by a puff of a notorious sham "Ear Institution," the parents of the child, in poor circumstances, were defrauded out of a considerable sum for a long series of (of course) perfectly useless visits to the bogus Institution.

The second case was that of a maiden lady, fair, forty, foolish and very fat. She fell into the hands of one of those gentlemen who find it possible to spend several thousands a year on advertising the fact that they possess the secret of an infallible "cure for obesity," for which they charge a merely nominal fee. It has long been a puzzle to know how these gentlemen manage to live by their benevolent vocation. Towards solution of this difficulty a hint was afforded by the case in question; the lady was driven into a condition of nervous excitement bordering upon dementia as a result of the extortion closely resembling blackmail to which she had been subjected. The exact amount out of which she had been defrauded was never exactly ascertained. Cases of this kind are of common occurrence, and could doubtless be narrated by every family doctor throughout the country, so that the nefarious traffic which receives so much effective help from the Press must be in extent altogether enormous. The medical quack is by far the most cynical and cruel of the class of criminals preying upon Society, and having the cunning to keep out of the meshes of the law. He is easily recognisable by any man of the world. It is difficult to form any excuse for a newspaper which lends itself to be his tool.

I am, Sir, yours truly,
August 20th, 1902. G. P.

THE CASE OF DR. RAINSBURY.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—At the Nottingham Assizes on July 17th, Dr Rainsbury, of Skegby, was sued by a collier employed at the Teversal Colliery for damages for alleged unskilful treatment of an injury to his arm, sustained in November, 1900.

The trial resulted in a verdict for the plaintiff for £25 damages and costs. It would serve no useful purpose now to enter at length into the merits of the case, as judgment has been given. From perusal of the report of the trial it appears that Dr. Rainsbury has suffered a great hardship by reason of the judgment.

The expenses of defending the claims were borne by the Medical Defence Union (of which Dr. Rainsbury is a member) but the regulations of that Union do not allow of payment by the Union of any judgment debt and costs which be adjudged against a defendant.

The judgment debt and costs amount to £182 6s. 2d. Dr. Rainsbury has made no appeal to this Union for assistance, but in view of the special nature of the circumstances, and of the apparent injury which he has sustained, the President and Council recommend that a fund be raised by subscription in order to assist Dr. Rainsbury in discharging the judgment debt and costs.

I am accordingly requested to invite subscriptions to this fund.

The matter is most urgent and pressing. I therefore venture to ask that all intended donations be sent to me at the earliest opportunity.

I am, Sir, yours truly,
GEORGE S. O'RORKE,
Secretary, Midland Medical Union.
Nottingham, August 14th, 1902.

THE NOMENCLATURE OF SURGICAL OPERATIONS FOR UTERINE TUMOURS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I was much interested in reading Dr. Stuart Nairne's letter commenting on the reports of two cases I published in THE MEDICAL PRESS AND CIRCULAR of July 16th and 23rd.

The term "resection" as suggested by Dr. Nairne is, of course, a correct one; but inasmuch as the three operations referred to, namely, the removal of subperitoneal, interstitial, and intra-uterine myomata respectively, are distinct and recognised surgical procedures, it seems to me desirable that they should have distinctive names. If we employ the word "resection," we shall have to speak of abdominal resection of subperitoneal myomata, abdominal resection of interstitial myomata, abdominal resection of intra-uterine myomata. Now these titles are a little long. The resection of a myoma is clearly indicated in the word "myomectomy," which has come into general use. Moreover, although myomata are found in other parts of the body, their occurrence in the uterus is so preponderating that the term "myomectomy," when unqualified, would be universally understood to mean the removal of a uterine myoma.

I readily admit that the names I adopted, namely,

"1. Abdominal myomectomy for cases in which a subperitoneal pedunculated myoma is removed from the uterus,

"2. Abdominal enucleation for cases in which a myoma is shelled out of the substance of the uterine walls,

"3. Abdominal hysterotomy for cases in which the uterine cavity is opened and a myoma removed from its interior,"

are far from being the best that could be used. Indeed, I have not been satisfied with them myself, and have employed them *faute de mieux*. Thinking over the matter lately, I have come to the conclusion that the following terms would be preferable as being more descriptive and not unduly long, namely,

1. Abdominal subperitoneal myomectomy.
2. Abdominal interstitial myomectomy.
3. Abdominal intra-uterine myomectomy.

The word abdominal might be omitted, providing that it were understood that procedures carried out through the vagina were specially labelled "vaginal."

I quite agree with Dr. Nairne that gynæcology is truly a branch of general surgery; but it will be admitted that the uterus in its relation to tumours and their removal practically stands in a category apart from that of other organs, and it appears to me that there is no disadvantage in its having a special nomenclature.

I shall be very interested to hear Dr. Nairne's views on my present suggestions, as well as the opinions of any others who are interested in securing a more satisfactory nomenclature for gynæcological operations.

Two printer's errors in Dr. Nairne's letter require to be pointed out. In line 14, "3. Abdominal hysterectomy" should read "3. Abdominal hysterotomy," and in line 16, for "consecutive" read "conservative."

I am, Sir, yours truly,
Arthur E. Giles.

London, August, 1902.

Literature.

THE THOMPSON-YATES LABORATORIES. (a)

This excellent volume contains fourteen different papers upon a variety of subjects. The opening paper upon The Injury Current of Nerve, by J. S. Macdonald, is the most elaborate article in the volume. It is a most careful piece of work, and the author has taken full advantage of the more recent and extended physical data now available for the physiologist in working out the results of electrical experiments. It is not possible to do more here than merely indicate the nature of the work. It is specially concerned with determining the value and direction of one of the pre-existing factors which plays an important part in the injury current of nerve, viz., the solution which bathes the outer surface of the nerve fibres. Its influence appears to be due to its being a solution of electrolytes, its inorganic salts. The evidence points to the conclusion that the electrical phenomena of nerve depends entirely upon the inorganic salts which it contains. A preliminary communication follows, of much interest, on the cerebral cortex of some of the higher apes, by Grünbaum and Sherrington. Annett, from an experimental investigation into 108 cases of tuberculous expectoration in public thoroughfares concludes that more strict measures must be adopted by sanitary authorities to prevent expectoration, not only in public buildings, but in public thoroughfares, and for the more complete cleansing of these places. Boyce describes a case of pseudo-actinomycosis of the udder of the cow, and Griffith an isolated case of plague. Of more general interest is Hume's paper on a new pathogenic bacillus isolated from a case diagnosed as typhoid fever, with a summary of fourteen similar cases hitherto reported. It differs from the bacillus typhosus not only in not being agglutinated with typhoid serum, but in a number of other characters. It is moreover agglutinated with its own serum, which has no such power over the true bacillus typhosus. It is obvious that a knowledge of this bacillus is an important practical matter. Another subject of great practical importance is the fungus deposit which forms in unfiltered water mains. Boyce has examined the mains which convey the Liverpool water from Lake Vyrnywy, which, owing to a deposit within them, have shown a gradual falling-off in the quantity of water capable of passing through the pipes in the twenty-four hours. Coutts's article on sulphide-producing organisms has a bearing upon the bacterial method of sewage disposal. Physicians will be interested in Little's account of his new nitrometer for the clinical estimation of urea by the hypobromite process. Other articles are extensive focal necrosis of the liver in typhoid, by Glynn; multiple aneurysms of the aorta, by Abram and Dimond; a preliminary note upon a trypanosome occurring in the blood of man, by Dutton; some notes on the embryos of strongylus intestinalis, by Van Durne. This interesting and valuable volume is completed by Durham's report of the Yellow Fever Expedition to Parà, which has already been foreshadowed in various places, and in connection with which the late lamented death of Walter Myers will still be fresh in everyone's memory.

JOURNAL OF OBSTETRICS AND GYNÆCOLOGY. (a)

We have received from Messrs. Baillière, Tindall and Cox the first volume of the new *Journal of Obstetrics and Gynæcology*, which forms a handsome work of close on 800 pages. From the introduction to the volume we learn that the aim of the promoters is to supply a special journal, independent of any society, which will furnish a complete and impartial record of British obstetrical and gynæcological work and a summary of contemporary thought and achievement throughout the world. The volume before us affords ample proof of success in the attainment of this object. Among many interesting and important original communications to its pages we may mention Cullingworth on "Uterine Fibro-myoma," Eden on the "Toxæmic Theory of Pregnancy," and Champneys on "Tubal Gestation," while Drummond Robinson has contributed a lengthy critical review on the bacteriology of the uterus and vagina during labour and the puerperal period. The columns devoted to reviews might, we consider, with advantage be extended, as in a journal of the kind all important works bearing on obstetrics or gynæcology should be noticed. This, however, will doubtless be done in the future. We congratulate the promoters and editors on the success which has attended their efforts.

BACTERIOLOGICAL TECHNIQUE. (b)

This is a useful laboratory handbook of bacteriology. The author's claim that this edition is a considerable improvement upon the first is amply justified. Additions have been made to practically every section of the work, and many new illustrations have been substituted for some of those in the first edition. The illustrations of bacteria are mostly very good and clear, and deserve a special word of praise. Part I. is devoted to bacteriological technique, and many useful methods have been added to this edition. Part II., dealing with the preparation of nutrient media, incubation, inoculation and methods of examining infected animals, air, water, soil, &c., has also had additions made to it. The instructions are necessarily much condensed, and such an important matter as water analysis might, with advantage, have been extended. Part III. deals with the various bacteria pathogenic to man and animals, and also with a number of other bacteria, such as those found in the mouth, in soil, milk, &c., and those concerned in nitrification and phosphorescence. The facts are necessarily given very shortly under definite heads, so as to be easily found, a form which is specially useful to the laboratory worker. Parts IV. and V. deal with fungi and yeasts, while the last parts, viz., VI. and VII., deal with the protozoal organisms of malaria, &c., and the very minute organisms of African horse sickness, pleuro-pneumonia, &c., which are so small that they pass through bacterial filters. These parts are all brought well up to date, the more important literature of recent times bearing upon them having received attention from the author. Altogether the book will be found to be a useful and trustworthy help by the laboratory worker in bacteriology.

(a) "The Thompson-Yates Laboratories' Report." Edited by Robert Boyce and C. S. Sherrington. Vol. IV., Part II. 1902. London: Longmans, Green & Co.

(a) "Journal of Obstetrics and Gynæcology of the British Empire." Vol. I., January to June, 1902. London: Baillière, Tindall and Cox. Pp. 713.

(b) "Manual of Bacteriological Technique and Special Bacteriology." By Thomas Bowhill, F.R.C.V.S., F.R.P.S. Enlarged Second Edition. Revised, with numerous original illustrations. Edinburgh: Oliver and Boyd. London: Simpkin, Marshall, and Co., Limited. 1902.

HARE-LIP AND CLEFT PALATE. (*a*)

Surgeons attached to general hospitals as a rule do not go out of their way to operate on cases of hare-lip and cleft palate, as the trouble is very great and the results are very often disappointing. The author speaks of the difficulty, and says, "I know of few operations in surgery in which it is so difficult to obtain a really good result as in an operation for hare-lip." If this is true of hare-lip it is certainly true of cleft palate. These subjects are carefully considered in the work before us. Some excellent photographs before and after operation are also included, and any surgeon who wishes to specially study this subject will find the information given very useful.

HEATH'S CLINICAL LECTURES. (*b*)

We have carefully perused this volume, which teems with practical information on a variety of surgical subjects comprising seventeen lectures which the author states are a collection of clinical lectures delivered by him in University College Hospital during the last few years, and he has also included two of the Lane Lectures delivered in the Cooper Medical College, San Francisco, in 1897, and the Hunterian Oration, delivered in the Royal College of Surgeons in the same year. The lectures are all interesting and the subjects well chosen and practical.

WATER AND ITS PURIFICATION. (*c*)

Dr. Rideal's writings are always interesting, and the book before us is certainly no exception. The subject of water purification is, as the author points out in the preface, one of supreme importance to all classes of the community, and it is a matter of regret (in face of the obvious lesson to be learnt from recurrent epidemics of water-borne disease) that it receives so little attention from many local authorities.

In the book before us every phase of the subject is treated in a masterly fashion. Practically nothing of importance is omitted. Sources of water, impurities, storage, distribution, purification and analysis are all dealt with in a manner which leaves little scope for criticism, while by no means the least valuable portion of the work will be found in the appendix, which contains a short history of some recent epidemics, together with suggestions for future legislation. Brightly and succinctly written, its pages are never dull, and teem with information of a most useful and practical description. The illustrations, too, are numerous and instructive, though it is to be regretted that Figures 28 and 29 have been omitted. The book should be read and followed by all persons having charge of water supplies, and might be placed in the hands of all local authorities with advantage both to themselves and to those over whose sanitary destinies they preside.

Medical News.

A Medico-Legal Anomaly.

In 1895, a girl, then 17 years of age, was accidentally struck by the bullet of a saloon rifle, the missile remaining in the brain. She recovered from the injury, but since that time she constantly complained of headache and uncomfortable symptoms in the head. Last week she died somewhat suddenly, and at the autopsy an abscess of the brain was found to have formed around the bullet. At the inquest the jury were directed that they had not to inquire into the circumstances under which the injury was inflicted, the law assuming that when death takes place more than a year and a day after the occurrence it is due to some other cause. In accordance with this direction the jury returned a verdict of death from natural causes, which is a tax on one's credulity.

The Fourteenth International Medical Congress.

Arrangements have been concluded with the various railways of France and Spain by which members of Congress will be allowed a reduction of 50 per cent. on the price of tickets. The Spanish and Italian navigation companies have also consented to a reduction, the former of 33 and the latter of 50 per cent. on the usual fares. An office has been opened at Madrid to provide visitors with suitable lodgings, and communications relating thereto should be addressed to the "Bureau des Logements," Faculté de Médecine, Madrid. The subscription (30 pesetas or 23 francs), may be paid either direct to Madrid or to the local secretaries.

A Difficult Diagnosis.

A few days since, at York, a lad of seven, after eating some berries plucked from a shrub near the school, fell ill, and was taken to the hospital, where "the usual remedies were applied," He died soon after, and at the autopsy it was found that death was really due to fracture of the skull. Inquiry elicited the fact that the lad had fallen from a wall while playing with his schoolfellows, when no doubt the injury was inflicted. The case is an instructive one as showing how necessary it is always to keep an open mind, whatever history the friends may give of the occurrence.

Washing Liquor for Lime Water.

A child, æt. 4, died at Bradford last week in consequence of washing liquor having been given in mistake for lime water. Washing liquor, we may recall, is made by boiling lime with soda and contains caustic soda. It is therefore obviously a liquid which ought only to be sold in bottles of a special shape and duly labelled "poison."

The Ætiology of Cancer.

The Spanish official *Gazette* has published a decree appointing a Commission consisting of the following Spanish physicians:—Ustariz, Bravo Coronado, Cervera, and Jiménez, to investigate the ætiology of cancer, and with them is associated Hans Leyden, physician to the German embassy in Madrid. The Commission will work under the control of the Public Health Minister, Señor Pulido, formerly of the editorial staff of *El Siglo Medico*, one of the most enthusiastic sanitarians in Spain. The co-operation of the medical schools and of private practitioners is solicited. The work of investigation will be carried on in connection with that being undertaken in Berlin.

Dublin Death-rate.

The deaths registered in the Dublin registration area for the week ending Saturday, August 16th, 1902, represent an annual rate of mortality of 20·0 in every 1,000 of the population. There were 20 deaths from measles, 19 deaths from diseases of the nervous system, 21 deaths from diseases of the circulatory system, and 19 deaths from diseases of the respiratory system; 55 infants died during the week, of whom 27 were under one year old. Within the city the death-rates in the following districts were as follows:—Castle Street district, 45·7 Blackhall Place, 37·9; and Clarence Street North, 23·9.

(*a*) "Hare-lip and Cleft Palate." By R. W. Murray, F.R.C.S., Surgeon David Lewis Northern Hospital, Liverpool, late Surgeon Liverpool Infirmary for Children. Pp. 29. Price 3s. London: J. and A. Churchill. 1902.

(*b*) "Clinical Lectures on Surgical Subjects," delivered in University College Hospital. By Christopher Heath, Past President Royal College of Surgeons, England, Surgeon to University College Hospital. Second Series. London: J. and A. Churchill. Price 6s. Pp. 343. 1902.

(*c*) "Water and its Purification." By Samuel Rideal, D.Sc. Lond., &c. Pages xvi. and 346. Second Edition, revised and extended. London: Crosby Lockwood and Son. 1902.

Notices to Correspondents, Short Letters, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

COOK'S METHOD OF URIC ACID ESTIMATION.

To 10 c.c. of urine add 0·5 to 1·0 gms. of sodium carbonate and ammonium hydrate 1·2 c.c. Centrifugate and pour clear urine into tube. Add and mix ammonium hydrate 2 c.c., sol. ag. NO_3, 5 per cent., 2 c.c. Centrifugate. Again add ammonia, and the solution is centrifugated till the minimal reading is obtained. One c.c. of ppt. represents 0.001176 gm. of uric acid in 10 c.c. urine, and the percentage is obtained by multiplying the total amount by 10.

H. O. V.—"Manquee," a disease which attacks young cattle in South America, is credited with being due to the very smallest microbe yet discovered. It is much smaller than the bacillus of influenza, and can with difficulty be seen under a magnification of 1,500 diameters.

REMARKABLE SYMPTOMS.

"Well, Patrick," asked the doctor, "how do you feel to-day?" "Och, doctor, dear, I enjoy very poor health, intirely. The rheumatics are very distressin' indade; when I go to slape I lay awake all night, an' my toes is swelled as big as a goose hen's egg; so whin I sthand up I fall down immajit."

H. A. R.—We do not see that any useful purpose is likely to be served by publishing your letter, especially as the question is now virtually settled for good or ill.

TURPENTINE AS A DEODORANT.

Smilax.—Cases of prostatic enlargement associated with dribbling of urine, attended with the usual obnoxious smell, are offensive to strangers and the source of much misery to the patients themselves. A small quantity of pure spirits of turpentine sprinkled on the patient's dress and on the bedclothes will act as a good deodorant, counteracting the urinous smell to a remarkable degree.

Dr. Radley.—The course you propose does not appear to be open to objection, but you must be careful to avoid any misunderstanding on the part of the patient. The alternative proposal cannot be for a moment entertained.

THE HONORARY F.R.C.P. LOND.

In reply to our correspondent, "F.R.C.P.Edin.," the honorary Fellowship of the R.C.P. of London was conferred on H.M. King Edward VII. about four years ago, in recognition of the great interest always evinced by him in the medical profession, especially in connection with the Prince of Wales Hospital Fund. We believe his Majesty is the only layman on whom this distinction has been conferred.

Appointments.

Bennett, J., M.B., Ch.B., B.A.O.R.U.I., Medical Officer of Health for the Borough of Hyde, Cheshire.

Coaker, F. W. J., L.R.C.P.Lond., M.R.C.S., Medical Officer of Health for the Bromsgrove Rural District.

Ewart, David, M.B., Ch.B.Edin., F.R.C.S.E., Honorary Surgeon to West Sussex, East Hampshire, and Chichester General Infirmary.

Fenton, W. R., B.A., M.B.Univ.Dublin, Acting Principal Medical Officer in Mashonaland during the absence on leave of Dr. Fleming, C.M.G.

French, G. W. H., F.R.C.S., Assistant Surgeon to St. Paul's Hospital for Skin and Genito-Urinary Diseases, Red Lion Square, W.C.

Hill, W. J., L.R.C.P.Lond., M.R.C.S., Medical Officer of Health to the Cleveland Urban District Council.

Jenkins, G. H., L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., Medical Officer of Health to the Usk Urban District Council, Mon.

McGachen, Fred Wm. Dobson, M.D., D.Ph.Lond., Medical Officer to the Weymouth and Westham District, and Public Vaccinator of Weymouth and Melcombe Regis, vice Dr. E. N. Pridmore, M.B.Lond., resigned.

Peacock, W. E., M.D.Durh, Medical Officer of Health to the Felling Urban District Council.

Steinhauser, J. R., M.B., B.Sc.Lond., Medical Officer for the Borough of Lewes.

Walker, J. W. Thomson, M.B.Edin., F.R.C.S., Assistant Surgeon to the North-West London Hospital.

Vacancies.

Bethnal Green Infirmary.—Assistant Medical Officer. Furnished apartments, board, and washing provided. Salary £100 per annum. Applications to the Medical Superintendent of the Infirmary, Cambridge Road, N.E.

Bristol General Hospital.—Medical Officer for the Cottage Hospital at Avonmouth and Contractors' Sick Club. Salary £250. Applications to the Secretary, Bristol General Hospital, Bristol.

Cancer Hospital, London.—Pathologist. Salary £250 per annum. Applications to the Secretary at the Hospital, Fulham Road, S.W.

Cardiff Infirmary.—Resident Medical Officer. Salary £100 per annum, with board, washing, and furnished apartments. Applications to Leonard D. Rea, Secretary and General Superintendent.

Carrigbyrne Dispensary District.—Medical Officer. Salary £100 per annum, together with the usual vaccination fees, and also £15 per annum as Medical Officer of Health. Applications to P. A. Pope, Clerk of the Union. (See advt.)

Cheltenham General Hospital.—Assistant House Surgeon. Salary £112 per annum, with board, lodging, and washing. Applications, with copies of testimonials, to be sent to the Honorary Secretary and Treasurer, General Hospital, Cheltenham.

City (Fever) Hospital, Aberdeen.—Resident Physician. Salary £100, with board and rooms. Applications to the Medical Officer of Health, City Buildings, Aberdeen.

City of Sheffield.—Second Assistant Medical Officer at the City Hospitals. Salary £120 per annum, with board, lodging, and attendance. Applications to H. Sayer, Town Clerk, Town Clerk's Office, Town Hall, Sheffield.

County of Lanark.—District of the Middle Ward.—Resident Physician. Salary £140 per annum, with board, &c. Applications immediately to J. B. Ferguson, District Clerk, District Offices, Hamilton.

Denbighshire Infirmary, Denbigh.—House Surgeon. Salary £100, with board, residence, and washing. Applications to W. Vaughan Jones, Secretary.

Middlesex Hospital, W.—Medical Officer. Salary £150 per annum. Applications to F. Clare Melhado, Secretary-Superintendent.

Parish of Birmingham.—Workhouse Infirmary.—Assistant Resident Medical Officer. Salary £100 per annum, with furnished apartments, rations, coal, gas, laundry, and attendance. Applications to Walter Bowen, Clerk to the Guardians, Parish Offices, Edmund Street.

Roxburgh District Asylum, Melrose, N.B.—Assistant Medical Officer. Salary £120 per annum, with board, rooms, and washing. Applications to the Medical Superintendent.

Tadcaster, Goole, Riccall, and Selby Rural Districts, and Selby Urban District.—Medical Officer of Health. Salary £120 per annum. Applications to E. Townend, Clerk to the Joint Committee, 1, Abbey Place, Selby.

Births.

Jones.—On Aug. 24th, the wife of E. Lloyd Jones, M.D. (Camb.), Corpus Buildings, Cambridge, of a daughter.

Ward.—On Aug. 21st, at 22, Museum Street, Ipswich, the wife of Francis Ward, M.D., of a daughter.

Deaths.

Jeaffreson.—On Aug. 22nd, at Stanmore, Frances, widow of Henry Jeaffreson, M.D., and lately of 14, Southwick Crescent.

Murphy.—On July 27th, at his residence, the Simmer and Jack Hospital House, Germiston, Transvaal, G. Wyndham Murphy, M.D., aged 51 years. Deeply regretted.

Rodwell.—On Aug. 21st, at Loddon, Norfolk, on the eve of his 50th birthday, Edward Manby, M.R.C.S., L.S.A., second son of the late George Rodwell, surgeon, of Loddon.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—St. George's, 2 p.m.—St. Mary's, 2.30 p.m.—Middlesex, 1.30 p.m.—Westminster, 2 p.m. Chelsea, 2 p.m.—Samaritan (Gynæcological, by Physicians), 2 p.m.—Soho Square, 2 p.m.—Royal Orthopædic, 2 p.m.—City Orthopædic, 4 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a.m.—Royal Free, 2 p.m.

TUESDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex, 1.30 p.m.—Westminster, 2 p.m.—West London, 2.30 p.m.—University College, 2 p.m.—St. George's, 1 p.m.—St. Mary's, 1 p.m.—St. Mark's, 2.30 p.m.—Cancer, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Royal Ear, 3 p.m.—Samaritan 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—Soho Square, 2 p.m.

WEDNESDAYS.—St. Bartholomew's, 1.30 p.m.—University College, 2 p.m.—Royal Free, 2 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. Thomas's, 2 p.m.—London, 2 p.m.—King's College, 2 p.m.—St. George's, (Ophthalmic) 1 p.m.—St. Mary's 2 p.m.—National Orthopædic, 10 a.m.—St. Peter's, 2 p.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Gt. Ormond St., 9.30 a.m.—Gt. Northern Central, 2.30 p.m.—Westminster, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Cancer, 2 p.m.—Throat (Golden Square) 9.30 p.m.

THURSDAYS.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—University College, 2 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—London, 2 p.m.—King's College, 2 p.m.—Middlesex, 1.30 p.m.—St. Mary's, 2.30 p.m.—Soho Square, 2 p.m.—North-West London, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central (Gynæcological), 2.30 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—St. Mark's, 2 p.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square) 9.30 a.m.

FRIDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—King's College, 2 p.m.—St. Mary's, 2 p.m.—Ophthalmic, 10 a.m.—Cancer, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—City Orthopædic, 2.30 p.m.—Soho Square, 2 p.m.

SATURDAYS.—Royal Free, 9 a.m.—London, 2 p.m.—Middlesex, 1.30 p.m.—St. Thomas's, 2 p.m.—University College, 9.15 a.m.—Charing Cross, 2 p.m.—St. George's, 1 p.m.—St. Mary's 10 p.m.—Throat (Golden Square), 9.30 a.m.

At the Royal Eye Hospital (2 p.m.), the Royal London Ophthalmic (10 a.m.), the Royal Westminster Ophthalmic (1.30 p.m.) and the Central London Ophthalmic Hospitals operations are performed daily.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, SEPTEMBER 3, 1902. No. 10.

Original Communications.

A CASE OF MALIGNANT ENDOCARDITIS, WITH HEMIPLEGIA AND EMBOLISM OF ONE ILIAC ARTERY. (a)

By GEORGE CARPENTER, M.D.LOND.,
Physician to the Evelina Hospital for Sick Children.

ARTHUR E——, æt. 7, had a strong family history of tuberculosis, and his brother, at the time of his illness, was in the Evelina Hospital suffering from tuberculous dermatitis, and died, whilst an inmate there, of morbus cordis.

The boy Arthur had been quite healthy, with the exception of an attack of measles, till July 4th, 1901, when a rash was "noticed all over him," and he was feverish; there was neither sore throat nor sickness. He was seen for the first time on July 11th in the casualty department of the Evelina Hospital, on which occasion "his right leg was bent at the knee, and stiff, and the knee-jerk was exaggerated on this side." A systolic mitral bruit was heard, which was conducted into the axilla, and he was short of breath.

On July 17th he was taken ill suddenly whilst at play. He came indoors to his mother, complaining of headache, and was put to bed. Almost immediately he had a fit, and became unconscious. He twitched in the fit all down one side, but which was not certain, and he remained unconscious until he was admitted to the Evelina Hospital on the following day, when he was found to be twitching on the *left* side.

On admission on the 18th he was comatose, his eyes were sunken, his lower jaw relaxed, and his left side paralysed, the lower half of the face being involved. The knee-jerk was absent on that side, but it was present on the right, the arm and leg of which he moved freely. There were no convulsive movements. The right pupil was widely dilated, and did not react to light; the left reacted, though badly. The cardiac impulse was in the sixth interspace, 1½ ins. outside the nipple line, and unaccompanied by extension of dulness to the right; but there was some epigastric tenderness. A loud systolic mitral bruit was audible, which was conducted into the left axilla. The lungs were normal. The liver and spleen were not enlarged, and the urine was free from albumin. The pulse was slow, weak, and irregular; the breathing was also slow, and occasionally sighing. Sweating was profuse and general. The temperature by the rectum was subnormal. The abdomen was sunken (scaphoid), and tender to the touch. He was sick twice during the day.

July 19th.—He was very sick during the early part of the night, after which his left arm was rigid for a time, and the other limbs were slightly so. He subsequently vomited half a dozen times. During the day "he moved all his limbs," and there was no rigidity. He was semi-conscious, and very irritable when disturbed. The pulse was very slow, but less irregular, and the pupils were not so unequal. A note on the 20th stated that during the night he moved the right side of his body more than the left, and his left leg was at times rigid. He continually drew his right hand across his forehead, and was still very irritable when disturbed. The pulse was slow and irregular; the pupils as before; and during the day the general condition was much about the same. His temperature, which had all the time been subnormal, rose to 100° F., and on the 21st it was 102·2° F. The fundus oculi was examined, as it was thought he was developing tuberculous meningitis, and marked optic papillitis was discovered. The sickness had ceased. He did not resent being disturbed. The arms and legs were rigid at times, the hands clenched, and the eyes fixed, and occasionally there were muscular twitchings. The pulse was rather quicker, but still weak and irregular, and he was more feeble. He had been fed by the nasal tube, which was still being used. On the 22nd he had been very quiet all night, his hands were clenched and his limbs rigid, and he occasionally drew up his right leg. The abdomen was very scaphoid. During the day he scarcely moved at all, his hands were still clenched, and the limbs occasionally rigid. On the 23rd he had passed a peaceful night, and was quiet all day, occasionally moving his right arm over his head. On the 24th he had been very quiet all night, and slept with his eyes half closed until the early morning, when he commenced to groan and scream, and drew his right hand across his forehead; this lasted for about an hour. He now took a little food by the mouth, and appeared to understand when spoken to, but he was unable to speak. He could not open his right eye (ptosis), but the left was constantly open. The left side of the body was rigid, and he moved his right leg and arm quite easily. The pulse was still weak and irregular. His temperature had been gradually falling, and on this day was once more sub-normal. On the 25th, during the early part of the day, he was quietly sleeping, but in the evening he cried out and drew up his right leg, and put his right hand to the right side of the head, as if in pain. He was unable to move the left side. On the 26th he occasionally cried out and drew up his right leg. He could open his right eye a little wider. He constantly rubbed the right side of his head. He was fed partly by the nasal tube and partly by the mouth. His general condition was much about the same. On August 1st he was quite conscious all day, and talked incessantly. He frequently waved his right leg, and his right eye was more open. He moved his left arm a very little, and the knee-jerk on the left side had returned, and was increased. On August 6th the optic discs were swollen, about 3 D., and the vessels were in places partly buried in exudation. A little more than the swollen diameter of the optic disc distance in the left eye, in the upper and inner quadrant, was a small pear-shaped patch of a light fawn colour. It had to be carefully looked for by the direct method, as the difference in colour tone between it and the red reflex was not so marked as to make it appear a *very* staring feature, though quite striking enough; but by the indirect method it stood out well, and readily attracted my attention. I considered it to be tubercle in the choroid, though, in my experience, its shape was not quite classical, and perhaps it was not quite obtrusive enough; but, apart from these criticisms, it was very like indeed, and I was quite prepared to accept it as a tubercle, and did so, founding a diagnosis of tuberculous meningitis on my discovery. (*a*) The optic papillitis was the pronounced variety usually associated with cerebral tumours, and I thought it possible he had a cerebral tuberculous tumour and secondary tuberculous meningitis. He could not now move his right eye in any direction, and he could only look towards his nose with his left eye.

(a) Read before the Society for the Study of Disease in Children, on Friday, April 18th, 1902.

August 12th.—Since August 1st he has had a good appetite, and has slept satisfactorily. He is beginning to move his eyes a little more; both external recti are paralysed now. There is loss of tactile sensation below the left knee, and diminished sensation over the whole of the left arm. The temperature up to this date has been either normal or subnormal; there have been one or two trifling rises, but they have not exceeded 100° F.

15th.—Movements of the left arm and leg have greatly improved. In the former there is an all round improvement, and in the latter they are best at the hip-joint. The knee-jerk is exaggerated, but knee-clonus cannot be obtained; there is, however, ankle-clonus. Sensation to pain is normal. Tactile sensation is much better in the leg. In the arm tactile sensation and sensation to pain have improved. The lungs, spleen, and kidneys are normal. There is now paresis of the right external rectus, and a linear hæmorrhage on the outer side of the right optic disc. Towards the periphery of the inner hemisphere of the left fundus, there is some faint diffuse pigment.

29th.—The boy is still rather sleepy-looking, and he is pale. The left side is weaker than the right, but there has been marked improvement in the paralysis since massage was commenced on August 9th last. He has recovered from the facial paralysis and the ocular movements have become natural. The knee-jerks on both sides are brisk, being most marked on the left. Sensation is now normal.

September 2nd.—The tubercle-like body in the left fundus oculi is more defined than has previously been the case. In the inner hemisphere in the periphery is a small bunch-of-grapes-like hæmorrhage, in which two minute retinal vessels terminate. Above this, and to its central side round pigment-granules are freely sprinkled over a limited area.

6th.—It was decided to inject the boy with tuberculin. Subsequent to August 12th his temperature began to rise little by little, the highest point reached being 102·4° F.; it was intermittent. In the morning it was subnormal, usually somewhere between 97° F. and 98° F., and in the evening mostly between 100° F. and 101° F.; sometimes more and sometimes less. The pulse during the subnormal stages varied between 96 and 112 beats to the minute, and during the rises of temperature between 112 and 160 beats to the minute. In the apyrexial periods the respirations varied between 20 and 36 to the minute, and during the pyrexial between 32 and 56 to the minute. Tuberculin (·003 c.c., supplied by the British Institute of Preventive Medicine) was injected at 2 p.m., when his temperature was 98·6° F.; at 4 p.m. it had reached 101·4° F, and by 6 p.m. was 101·6° F., and at 12 p.m. 99·8° F. Apart from the rise of temperature, which was but slightly in excess of what had already happened, nothing occurred. The fundus oculi was unaffected by it. A trace of albumin, unconnected with the injection, was found in his urine to-day; it had been tested on many occasions previously, and had always been found natural.

For the past three weeks (October 20th) the temperature has been oscillating, usually remittent, and latterly sometimes intermittent. It has but once fallen below the normal during the first two weeks. For the first week it mostly varied between 101° F. and 103° F. for the highest rises of temperature, and for the remaining two weeks between 101° F. and 102° F. For the last week it has often fallen to subnormal, and has but once exceeded 101° F. On the 22nd he was moaning and coughing frequently during the night, and he complained of pains in different parts of his body.

November 18th to the 26th.—He was very sick once during the night on the 18th. Between these dates slight traces of albumin were found in his urine. He was sleeping well, and taking his food satisfactorily, but was occasionally sick. On the 22nd his eyes were examined, and his optic discs were found to be turning white. There was no obvious squint or defect in the extrinsic muscles; the pupils were semi-dilated, and almost without direct action to light. For a month or more the temperature has been oscillating, and has been more often remittent than intermittent, it has only twice been over 102° F., and on many occasions it has been subnormal.

December 1st.—He slept well. All the morning he was very drowsy, and took his dinner with persuasion. At 1.20 p.m. his left arm and leg became convulsed, and he became unconscious. The pupils were unequal, the right being larger than the left. This condition continued until 2.45 p.m., when he was sick, since when he gradually returned to consciousness, but he was unable to speak. He was very restless, and constantly sat up in his cot, and cried out as if in pain. At 5.30 p.m. he asked for drink, and his speech gradually became quite distinct. He then complained of much pain in his head and abdomen.

On the 2nd he was drowsy and difficult to rouse. He complained of headache, and there was slight facial paralysis (incomplete) on the *right side* (?). The left arm was decidedly weaker than the right. The knee-jerks and clonuses were as before, and the legs were painful. Speech was very tremulous. slow, and almost unintelligible at times. The lips were blanched.

11th.—He slept well during the night of December 11th, but from 7.30 a.m. he was continually turning from side to side, or sitting up in his cot. His breathing was laboured, and his alæ nasi dilated. The face and lips were cyanosed. and many coarse crepitations were audible over the bases of both lungs. The pulse was barely perceptible, and his extremities were cold. He was continually muttering and screaming, and gradually his speech became quite incoherent. His pulse was then imperceptible,

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(*a*) *Vide* "Tuberculosis of the Choroid." By George Carpenter, M.D., and Sydney Stephenson, C.M. Illustrated by coloured plates. Reports of the Society for the Study of Disease in Children Vol. I., pages 169 to 181. 1901.

and at 1.55 p.m. he was slightly convulsed, and died five minutes later, having been in hospital for 145 days. There was but little, if any, alteration in the character of the fever until within a week of his death, when 99·8° F. was the highest point registered, and the temperature was for the most part subnormal.

Post-mortem Examination.—Brain.—The pia mater was much injected with blood-stained effusion over the whole surface of the brain. The convolutions were flattened, and much blood-stained fluid escaped on removing the brain from the skull. The base of the brain was covered with a hæmorrhagic gelatinous exudate, as was the vertex. There was no thickening of the pia mater, or any sign of tubercles along the vessels. The posterior part of the right cerebral hemisphere from the fissure of Rolando almost to the tip of the occipital lobe was considerably depressed. On opening the brain this depression was seen to be due to a "cyst" about the size of a walnut which was present in this region, extending forwards to about the middle of the lateral ventricle, and backwards to the limits of the posterior cornu of the ventricle. Greenish fluid with broken down brain substance was present in this "cyst," which was separated from the posterior cornu of the ventricle by a thin partition of white matter. The ventricle itself was somewhat dilated, but otherwise looked healthy. Behind this cystic area the white matter was more solid, but dark reddish-grey and dirty-looking—evidently necrotic. A great part of the white matter of the right occipital lobe was involved in this necrosis, as was also a small area of the grey matter of the posterior parietal convolution. The middle cerebral artery was carefully examined for an embolus, but it could not be found. Presumably the necrosis and softening which ensued had involved the region of the embolism, and so obliterated any trace of it. The rest of the brain was normal.

Respiratory System.—The respiratory system was practically normal, except for a doubtful infarct in the upper lobe of the left lung. No emboli could be found in the pulmonary arteries.

Circulatory System.—The heart was considerably enlarged, and a few petechiæ were present on its surface. The right auricle was healthy; the tricuspid orifice dilated. The right ventricle was hypertrophied and the valves healthy. The left auricle was dilated and its wall hypertrophied. On looking into it, the mitral orifice was found narrowed so as to admit a cedar pencil, the narrowing being due to the presence of a mass of "warty" vegetations projecting into the cavity of the auricle from the mitral valves. The left ventricle was much dilated; its wall was not much hypertrophied, and it was thinned near the apex. Projecting down from the mitral orifice into the ventricle was a large mass of vegetations, many of them a quarter to half an inch or more in length, and ribbon like, being attached at one end, and otherwise hanging free in the cavity. On cutting open the mitral orifice the opposed and auricular surface of the cusps were seen to be covered with sessile and pedunculated vegetations Large numbers of streptococci were seen in stained sections of these vegetations. The rest of the ventricle and the aortic valves were normal. The aorta, the left common iliac, and the external and internal iliac arteries were healthy. At the bifurcation of the right common iliac artery was a firm embolus which had eroded, and was closely adherent to, the walls of the artery. Spreading up from this embolus was a firm, decolourised, antemortem clot, more than an inch long, occupying nearly the whole length of the right common iliac artery. A small red clot (possibly post-mortem) extended down into the right external iliac artery from the embolus at the bifurcation of the common iliac. The internal iliac artery on the right side was occupied by a clot about one inch long and decolourised; it was breaking down and almost purulent. A piece of the embolus at the bifurcation was stained for organisms, and showed streptococci. The adjacent right common iliac vein contained a long dark clot (post-mortem clot) and its walls were apparently healthy.

Alimentary System.—The œsophagus, stomach, and intestines were normal, except for many small, circular, red patches in the small intestine; these were either small submucous hæmorrhages or hæmorrhagic solitary follicles. The spleen and kidneys showed many infarcts, recent and old. The liver was large, somewhat pale and soft, but otherwise normal. The other organs were apparently healthy.

Microscopical sections of the eyes were prepared by Mr. Sydney Stephenson, and it was found that the fawn-coloured patch in the choroid was not a tubercle, and that there were subretinal hæmorrhages, proliferation of the retinal pigment, and considerable optic papillitis, as detected during life with the ophthalmoscope.

METHODS OF UNITING DIVIDED INTESTINE WITH SPECIAL REFERENCE TO A NEW BONE BOBBIN FOR THAT PURPOSE. (a)

By E. STANMORE BISHOP, F.R.C.S.Eng.,
Honorary Surgeon, Ancoats Hospital, Manchester.

There are four classes of methods whereby the divided intestine may be reunited:—

First, by simple suture.

Second, by suture over instruments which are removed at the time.

Third, by suture over absorbable material, which is allowed to remain.

Fourth, by metallic couplers, also left *in situ*.

Suturing is done in all but the fourth class, and even in this two purse-string sutures are required.

Simple suturing is liable to be imperfect and to leave gaps by means of which leakage may occur. Besides, it is far more difficult, and almost of necessity is associated with more handling of the gut than any of the other plans.

Suture over instruments is neater, more likely to be complete, but the uniting surfaces are left with no protection during the plastic stage of union, the fæcal stream being allowed to pass over it in actual contact.

Metallic couplers are quick in application, and are likely always to be required when time is an imperative factor in the case; but they are heavy, tend to kink the bowel, sometimes produce necrosis which is not limited to the parts compressed, and their removal after their work is done does not always take place without a further interference.

The method of suturing over absorbable substances is an old one, and much ingenuity has been expended upon it. It dates from that known as the method of the four masters, in which a piece of trachea or dried gut was used. The bone plates of Senn, the raw hide of Byrom Robinson, and the various substitutes made of potato, carrot, &c., are all modifications of this. The representatives, however, of this class at present in use are mainly three—the bone bobbins of Jessett, Allingham and Robson.

A really good bobbin should have six characteristics. It should be:—

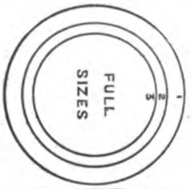
(a) Abstract of paper read before the British Medical Association at Manchester, July-August, 1902.

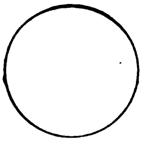
First, easy of introduction.

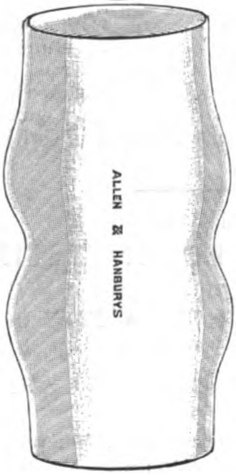
Second, perfectly simple, requiring no elaborate technique.

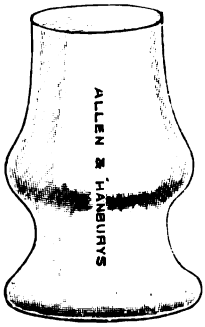
Third, resistant at first, absorbable later.

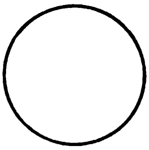
Fourth, so formed that the purse-string sutures which fix the intestinal ends upon it should approximate the two ends by the same movement as that by which they are fixed.

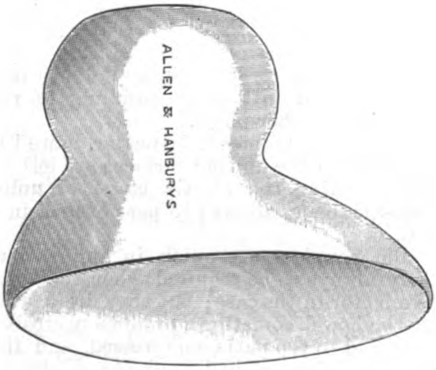


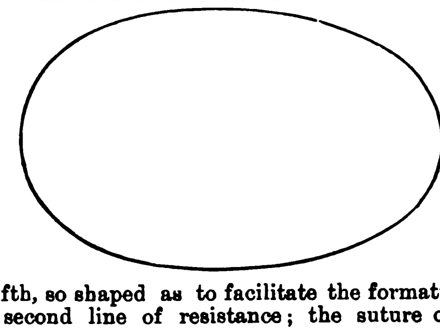












Fifth, so shaped as to facilitate the formation of the second line of resistance; the suture of the folds of gut outside the purse-string suture.

Sixth, of such a character as to protect the line of suture during the stage of plastic union.

Jessett's bobbin is easy to introduce, but it is in two pieces, each of which require separate fixation to the bowel end. A species of intussusception is produced which may persist and increase later. The fourth requirement, so admirably arranged for in Allingham's bobbin, is not possible with it.

Allingham's fulfils this well, but it is far more difficult to introduce, and if such a size is chosen as to suit the central point, which determines the future lumen of the gut, the ends of the bobbin unduly stretch the bowel above and below, and so increase the risk of post-operative necrosis.

Robson's bobbin makes no attempt to fulfil the fourth requirement, and the space between the two ends is too great to permit of the steadiness in fixation of the gut, so useful in making the secondary suture, and which is found in Allingham's model.

The bobbin which I show, and which has been made for me by Messrs. Allen and Hanbury, is based upon a combination of the main features of both Jessett's and Allingham's. It aims at obtaining the ease of introduction of the former whilst retaining the principle of the double inclined plane, so distinctive of the latter.

But no one form of bobbin is exactly suited to all the various operations now practised on the intestinal tract, and for which they may be needed. So although in all, as will be seen, the same underlying principle is present, each one of the three forms is modified to permit of its use in different positions. The first is for use in simple end-to-end union, but, though eminently useful in this, it is evident that if this were used in ileocolostomy the end which was in the colon would be too long, and would tend to obstruct the passage of matters in its lumen. In the second form that is avoided by simply truncating this end just beyond the highest point of the inclined plane on this side. The interior is flared to some extent so as to direct the fluid coming through from the small intestine away from the line of union between that gut and the colon. Although this form would do for pylorectomy, yet this the third fulfils the indication of that operation more perfectly. Experience has shown that the point most likely to yield and to permit extravasation is that at the junction of the vertical and circular lines of suture. The gastric end of this bobbin is therefore widely flared, so as to protect this more completely, whilst although the whole shape of the appliance is thus apparently greatly altered, it will, I think, be evident that the main principle is still preserved.

In all, the apposing surfaces are united to the bobbin by purse-string sutures, which approximate the two ends by the same movement as that by which they tighten them. In all a fold of intestine on either side just beyond is lifted up and rendered more easily available for the second line of suture. In all, the line of union is well protected from the fæcal circulation until it is safely and firmly united. And in all the introduction of the bobbin is rendered as easy as possible.

Death Under Chloroform.

A death under chloroform is reported from the Liverpool General Infirmary, the victim being a woman, æt. 34, who was about to undergo an operation for enlarged thyroid gland. She died suddenly, before the operation had been commenced, although the gland in nowise interfered with respiration. The usual verdict was returned. An omnibus conductor also died under chloroform last week at Guy's Hospital prior to undergoing an operation.

THE DIFFERENTIAL DIAGNOSIS OF FUNCTIONAL AND ORGANIC PARALYSIS. (a)

By THOMAS BUZZARD, M.D., F.R.C.P., Lond.
Consulting Physician to the National Hospital for the Paralysed and Epileptic.

Dr. Buzzard remarked that the expression "functional," as employed in this country, is scarcely ever met with in the writings of Continental authorities, where cases of the class so termed by us are always called "hysterical."

Without attempting to define the word, he thought that, for the purposes of the discussion, it would be convenient to consider it as applied to cases of paralysis which simulated more or less closely those arising from structural alterations of recognised character, within or of the nervous system, without being dependent upon any that the most advanced means of investigation enable us to distinguish.

He also thought that the term should be limited to cases of paralysis of a kind which it would be possible for at least some healthy persons to produce by voluntary simulation. This was not to imply that they are so produced (he entertained no doubt about the reality of the disorder), but in order to exclude from the category such examples as paralysis confined to the district of a single nerve-root or trunk of a mixed nerve. Functional paralysis could sometimes (though by no means always) be removed rapidly or suddenly as a result of persuasion or physical or moral shock.

He enumerated many symptoms which were conclusive as to the existence of organic disease, and thought that, on the other hand, there were probably none which, unsupported, could be relied upon to establish a diagnosis of functional paralysis.

Functional hemiplegia was rarely preceded by anything resembling apoplectic seizure; it was most commonly of somewhat gradual onset, and was principally differentiated by its failure to present that gradual passage from flaccidity to contracture which was characteristic of the organic form. It was prone to be associated with an amount of anæsthesia far exceeding that usually observed in organic hemiplegia, except of that form in which there is lesion of the sensory tract in the internal capsule. The points of difference between organic and functional hemianæsthesia were considered.

Reference was made to the characteristic hysterical gait. This had been well described by Todd, to whom we owe also the observation that hysterical hemiplegia rarely, if ever, attacked the face. Apparent exceptions to this experience were described.

Attention was drawn to Babinski's "flexion combinée de la cuisse et du tronc" as an important test. In organic hemiplegia an effort to sit up in bed without the aid of the arms causes the heel of the affected side to be lifted, which does not happen in the functional form.

Although a process of slow and gradual contracture is not prone to occur in the course of functional hemiplegia, a strong contracture (without previous flaccidity) may take place, often suddenly, and present a very marked *primâ facie* resemblance to that which results from an organic lesion. In such circumstances a point which he (Dr. Buzzard) had described many years ago, was useful for differential diagnosis. In true hemiplegic contracture of long standing, he had pointed out, the whole arm cannot be passively extended at one moment, but in the functional form, the arm, hand, and fingers can all, by an effort, be brought into one plane.

He did not think that inequality of the deep reflexes on the two sides could be absolutely relied upon to prove that the hemiplegia was of organic origin, although it was without doubt a very strong indication in that direction, and the same might be said of ankle clonus, which was sometimes, though very rarely, in the functional form indistinguishable from that depending upon organic lesion. Dr. Buzzard said that the experience of many years had entirely confirmed an observation published by him some twenty years ago as to the absence of, or at least difficulty in, eliciting plantar reflex in functional paralysis, and he thought the symptom was of great service as a negative sign in differentiating functional from organic paralysis. The "toe phenomenon," described by Babinski in 1896, was probably of still more importance, since it gave positive evidence of organic disturbance. Monoplegia of functional origin was then discussed, and it was shown that although in many cases the character of the affection could be conclusively demonstrated, its differentiation might sometimes present insurmountable difficulty. Paraplegia he thought rarely presented any serious difficulty, especially because of the aid to diagnosis afforded by the Babinski toe phenomenon and his own symptom of absent plantar reflex. Some remarks were made on the electrical condition sometimes observed in muscles in cases of functional paralysis, which might tend to cause misapprehension, and the various signs indicating functional paraplegia were described.

Some remarks on the comparatively moderate and oftentimes transitory paralysis of a limb or limbs in insular sclerosis concluded the address. Attention was drawn to the extreme frequency with which this was erroneously regarded as of functional character, and how much deplorable injustice was thereby inflicted on the numerous sufferers from this disease. He combated the idea held by some that these attacks of localised paralysis were at first hysterical and eventuated in organic change, and expressed the opinion that it was the attack of structural disease in the central nervous system which incidentally caused also hysterical symptoms. Not only physical shock, but the shock of structural disease was prone to induce, along with its immediately resulting symptoms, others of a functional and often transitory character. In conclusion, he pleaded for the medical student receiving accurate instruction and study of the Babinski toe phenomenon as a most important means of differentiating organic from functional paralysis.

THE VALUE OF THE IMPERFECTLY DESCENDED TESTIS. (a)

By W. MacADAM ECCLES, M.S., F.R.C.S.,
Senior Assistant Surgeon, West London Hospital, and City of London Truss Society, &c.

Almost every instance of imperfect descent of the testis is associated with a hernia into the unclosed processus vaginalis. Almost all cases of hernia associated with an imperfectly descended testis should be submitted to operative treatment. It is thus that the value or not of the organ which has not passed into the scrotum becomes of great moment, and the method of dealing with it of the highest importance.

The function of a testis is primarily to produce spermatozoa for the object of reproduction of the species, but there is undoubtedly at least one other,

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(a Abstract of Paper read before British Medical Association, 1902.

(a) Abstract of paper read before British Medical Association Meeting at Manchester, July-August, 1902.

although, perhaps, subsidiary use. Without either testis the individual will never acquire the full development of the male characteristics. Without the ability to produce spermatozoa on account of imperfect formation of the testis, the individual may still be capable of acquiring most, if not all, of the manly peculiarities, provided that he has the testes. Further, although possessing testes, yet the individual may not acquire the male characters, showing that these organs are lacking in both their proper functions. The testis, therefore, although it may not have reached its usual *habitat* in the scrotum, is yet in many cases of use to the possessor, in that it will enable him to develop certain peculiarities, which he would not otherwise acquire.

The value of the arrested organ in the case of unilateral arrest is not of course so great as it is in the instance of double arrest, for a single fully descended and fully developed testis is amply sufficient to perform all the requirements of full and complete growth of the body and the development of the male characters. Still even in these instances a value should or should not be set upon the imperfectly descended organ.

On the other hand when the arrest is bilateral the surgeon has to very carefully weigh whether or not the testis has a real value. An examination of a large series of arrested testes removed from adults show that by far the larger number have never been capable of forming spermatozoa. There are undoubted instances in which arrested testes have been the seat of spermatogenesis, but it will be observed that most of these have been cases in which the testes have never left the confines of the abdomen; in fact, it would seem that abdominal retention is not a bar to physiological testicular function. It is the inguinal testis which is debarred from producing spermatozoa. It would seem that delay in the inguinal canal in the muscular planes of the abdominal wall necessitates failure in the formation of cells capable of giving rise to spermatozoa.

It is an interesting fact that the testis of the boy before puberty, at least the testis that has fully descended, is entirely devoid, or nearly so, of a type of cell lying in the spaces between the seminiferous tubules. These interstitial cells are, however, beginning to be noticeable about the period of increased sexual development, and they may become very abundant.

In the microscopic examination however of the testis that has been retained, it is the rule rather than the exception to find these interstitial cells, and that long before the fifteenth year of life. Further, they are apt to be peculiarly abundant in those testes which have been removed from persons whose bodily growth is normal, in spite of the fact that their testes have never reached their normal habitat in the scrotum.

They may have the duty of producing a so-called internal secretion, a substance which is required for the right and proper growth of the body, and without its presence much of the normal growth may be lost, or the usual changes that should occur at puberty be profoundly modified.

That there is some obscure relationship between internal secretion of glands and the growth and division of cell-elements is becoming to be definitely recognised. Further, these internal secretions may also affect, and that very markedly, certain physiological functions of the body. For instance, it is well known that the removal of the testes or of the ovaries in adult life, and especially so if these organs are healthy at the time of their ablation, may be followed by severe, though possibly only temporary, nerve-storms in which the patient may be wholly irresponsible for his or her actions. On the other hand, supposing that the vasa deferentia only are divided, then there will still remain the testicular substance, and though this will atrophy, yet the glands will apparently retain their power of producing some form of internal secretion, which will obviate as a rule any nervous phenomena developing.

There are at least three ways in which the imperfectly descended testis may be dealt with when exposed in operating upon an accompanying hernia. First, to bring it into the scrotum and fix it there; secondly, to retain it within the abdominal wall; and thirdly, to remove it altogether. If the testis is of real value it should not be excised. It can be safely returned within the abdomen if it cannot be brought down.

The ideal method is that of orchidopexy, but unfortunately this is by no means always possible to carry out on account of the shortness of the vascular cord.

The plan of returning the testis within the abdomen has much to recommend it. By so dealing with the organ it is retained, and although it may not develop physiologically, yet its internal secretion will continue and be of service to the individual. Further, any tendency to hernia can be removed by the obliteration of the inguinal canal. Against the return of the organ within the abdominal walls is the argument that it is very prone to become the seat of malignant deposit, which in such a position would be highly dangerous.

There is, however, again a want of any definite evidence that an abdominal testis is so very subject to the onset of sarcoma or carcinoma. Seeing that instances of arrested testes are by no means uncommon, it is surprising to find how few records there are of malignant neoplasm of the imperfectly descended organ, and particularly so of the one that is within the abdomen. Another point against the return of the gland is that the possessor can no longer observe it, and may thereby become distressed, but this is overbalanced by his freedom from actual trouble in the organ itself.

To remove the organ has also much to recommend it. By this means what is considered by many to be a useless organ is ablated, all risk of malignant deposit removed, and all tendency to hernia obliterated by the suture of the canal. Further, such a removal would probably qualify the person to enter the public services, from which he would otherwise almost certainly be debarred by the medical regulations.

Against removal there are the arguments that the patient may regard the organ as one that it is well to possess, in spite of its being sexually useless, and that it may have some function of producing an internal secretion of benefit in the economy.

Taking, therefore, a case in which there is a unilateral arrest of a testis accompanied by a hernia on the same side, a radical operation is indicated, and the testis should be placed in the scrotum if this can be done perfectly easily and with a strong probability that it will not recede, but under other circumstances it should be preferably returned within the abdomen, unless there are special reasons why it is thought more advisable to remove it.

On the other hand, supposing that the case is one in which both testes are arrested, then it is injudicious to cut away either of them, for the amount of internal secretion that together they may produce may be sufficient to cause a proper development of the body in general, while that amount which one alone can provide may be altogether too little to cause this growth.

In such instances it is well to replace the testis within the abdomen on the side on which the hernia is, if it cannot readily be brought down, or there is no scrotum to receive it, for in this manner it is almost certain that its power of providing an internal secretion for the body is maintained, although there will be no attempt on its part to develop and produce spermatozoa, the possessor becoming virile but remaining sterile.

RODENT ULCER:

ITS PATHOLOGY AND TREATMENT. (a)

By J. D. McFEELY, F.R.C.S.,

Senior Surgeon Mercer's Hospital, Dublin; Member of Council, late Member of Court of Examiners, R.C.S.I.

In discussing the pathology of the subject I must state at the outset, in order to avoid any misconception, that I purpose confining my attention to what I may call clinical pathology—pathological phenomena observable during the progress of the disease—and so common an accompaniment as to merit more attention than, I fear, they have hitherto received. Some of these have not been noticed, as far as I am aware, at least in text-books; whilst many, if fully explained, might throw a new light on the *causa causans* of the disease. A Persian proverb says (*b*) : "Bonum est cribrare modicum sabuli, ut quis inveniat unam margaritam."

In teaching students at the bedside, I often try to impress upon them as forcibly as I can that in looking at any given case of disease they should try, not merely to look *at*, but by the light of pathology look *into*, the case ὡς εἰς τὸ κάτοπτρον (as into a mirror) if they would understand the changes that take place and apply rational and successful treatment.

If this be true with regard to disease in general, it is especially so with reference to diseases of which there is no consensus of opinion as to whether *any* treatment is effectual. "Tot homines, quot sententiæ" may be taken to be the general rule applicable to the treatment of rodent ulcers. If, however, this disease is to be treated on a scientific basis we must, I fear, still ask pathologists to tell us what rodent ulcer is?

Is rodent ulcer an epithelioma of the skin pure and simple? I shall leave it to others to answer this question, but will hazard the opinion that it is like the Scotch verdict—"not proven."

Now, as we are generally required to "give a reason for the faith that is in us," I shall briefly state the points from which I have drawn this conclusion.

(*a*) Rodent ulcer is essentially, as you are all aware, a local disease, and does not show metastases either by infecting contiguous lymphatic glands, or manifesting itself elsewhere beyond the seat of primary infection, as occurs in all other forms of the carcinomata.

(*b*) Even when left to follow its own free will—untreated, it shows a marked tendency at some part to take on a reparative process, whilst progressing slowly but steadily, in another direction.

(*c*) During its progress—this, I may remark, is the result of my own observations—it shows a marked tendency to avoid hair follicles, and will almost go out of its way, so to speak, to follow another course. Why this is so, if it be conceded, I can offer no opinion, unless perhaps it has a predilection for some particular tissue or cells.

I only know of one recorded case by, I think, Sir J. Paget, where rodent ulcer attacked the hairy scalp. The deeper layers of the cuticle are, as the disease progresses, attacked prior to the superficial or epithelial layer—as anyone will readily perceive in removing with a scoop or curette the diseased margins, the deeper being soft and friable—a contrast to lupus, for instance—whilst the outer layer seems unaffected, giving rise presumably to the terms "folded in" applied to these margins.

(*d*) The serous exudate, which is so common an accompaniment as to be looked upon as pathognomonic of the disease, seems to me to have a tendency to produce a form of auto-infection. This statement, unsupported by proof, will, I have no doubt, not commend itself to many here or elsewhere; nevertheless, I would ask you to look upon it as worthy of some consideration until such proof is at hand. This proof may, I hope, be furnished by inoculation with the exudate.

Observe, for instance, as occurs in the major part if not all of the cases where the disease is situated on the forehead or face, how the tendency is to extend downwards along the very course or channel this exudate follows. It is true there are exceptions to this rule; that this course is not always diseased, and often when so, undergoes a process of repair; but where the exudate is liable to accumulate, as towards the inner canthus of the eye, we almost invariably find a nidus of infection if the case is one of long standing; possibly from its liquefying or macerating action on the tissues.

Again, is it not possible that the unsatisfactory results of scraping or curetting are, in part at least, due to an auto-infection; the diseased portion infecting the raw surface?

What the cause of this exudate is, I am not quite prepared to say, but would suggest that the exciting cause is or contains the same "materies morbi" as causes the diseases, acting as an irritant on the vessels, plus the same cause as gives rise to exudates elsewhere, *e.g.*, into serous cavities, viz., altered state of vessel-wall, stases, want of external support, &c. Whatever be its cause, of one thing I am convinced, that the presence of this exudate is one of the best possible proofs that diseased tissue is still present.

(*e*) All surgeons will, I think, agree that caustics or irritants, *e.g.*, HNO_3 applied to truly carcinomatous growths, produce a very injurious effect by stimulating the cells to increased activity—mitosis—markedly exaggerates pain, whilst if the same be applied to rodent ulcer, the effect is in many cases to retard the growth. This one fact alone should justify one looking upon rodents as distinct from the carcinoma.

(*f*) I need only mention the marked difference in the rate of growth between truly malignant neoplasms and rodent ulcer.

Histologically, also, there are differences; but the time at my disposal will not permit me to say more than that these had better be left to the pathologist.

Until the pathology of the disease is placed beyond the question of doubt we might, while still looking upon the disease as closely allied to the genus carcinoma, more correctly consider it as intermediate between the truly malignant diseases on one hand, and simple or specific ulcer on the other.

I am almost inclined to regret that rodent ulcer is not a veritable child of the parent epithelioma; for then we might reasonably hope that this fell scourge, which has so long baffled our best efforts to find a remedy, might, in the not far distant future, be brought to submission, and cease to remain one of the opprobria of our profession, and the favourite hunting-ground of charlatans and quacks.

Treatment.

Before proceeding to mention in detail the particular form of treatment I adopt, let me ask, "Is rodent ulcer amenable to treatment without the probability of recurrence?" My answer to this question is "Yes," as much so as any simple or specific ulcer. This answer I give, not under the belief or impression that there are not other means of treatment which, if adopted with a firm belief in their beneficial properties might, and I am sure would, prove efficacious; but I submit the treatment I am about to mention has some claim to recognition. The results may, I hope, justify my conclusion.

I shall first briefly mention some of the recognised means that have been adopted with a fair amount of success. These may be divided into operative and non-operative.

Of the operative, the electro or thermo-cautery is I consider the best. Removing the diseased portion with the knife or curetting is, *per se*, by no means trustworthy or satisfactory; but on the other hand cautery, though giving good results, is not always applicable. Of the non-operative chlorate of potash, salicylic collodion or

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(*a*) Paper read before the Surgical Section of the British Medical Association at Manchester, July and August, 1902.

(*b*) It is sometimes a good thing to "sift a handful of sand that one may find a pearl."

Zn. chloride is, I think, best. You are aware that of late the Finsen and X-rays are greatly in request, and may ultimately take their place as recognised adjuncts to others, but so much time and trouble are required, and so many exposures necessary, that I fear they can never, except in isolated instances, become practicable as routine treatment. Besides, they are beyond the reach of the general surgeon or practitioner, by whom only in many instances early treatment is possible—and, of course, early treatment must give the best results.

The treatment I adopt in case the ulcer is not very large, or easily accessible, is, in the first instance, pure formalin; if a second or third application seems necessary later, formalin glycerine 30 to 50 per cent., with or without tannin.

In case the patient objects to be anæsthetised, I first use a local anæsthetic, either cocaine, eucaine, or, better still, acöin; giving a hypodermic of morphia in five or ten minutes after using the application, if the pain is severe. After this the patient is generally asleep in fifteen or twenty minutes.

In cases where the disease is of long standing, and likely to engage the bones or be accompanied by extensive destruction of tissue, or, if not readily accessible, as in Nos. II. and III., I prefer to anæsthetise the patient and remove by knife or curette all available diseased tissue, and apply as a styptic either powdered tannin or suprarenal gland extract to stop oozing and facilitate the formation of eschar, and then use formalin or formalin glycerine, keeping the patient fully under the anæsthetic for about five minutes afterwards. When the formalin is applied it should not be allowed to evaporate. If pure formalin be used in the first instance I rarely find a second or third application necessary, unless to some isolated patches; but I should strongly recommend any person not to hesitate to use it as often as may be necessary to remove all diseased tissue. Herein consists the success of the treatment.

The dark, I might say black, slough which forms should be allowed to separate spontaneously, and may be assisted by some non-irritating ointment, &c. After, or very often before, this slough or eschar has separated, the granulations will soon sprout up, and, if healthy, grow vigorously. The rate of growth of the healthy margins is sometimes marvellous. In case No. 2 fully two square inches had completely covered in about fourteen days.

I shall now briefly give notes of cases treated by this method:—

CASE I.—M. G., male, æt. about 70. The ulcer was of five years' duration, during four of which he had been treated at regular intervals by an eminent City surgeon. I saw him for the first time in my study, in June 1900. The ulcer, the surface of which was about one square inch, extended from the centre of the forehead to the root of the nose and the inner canthus of the right eye along the fronto-nasal junction. He had been advised by several medical men to have it removed by the knife; to this, however, he would not assent. After rendering the part anæsthetic by a mixture of cocaine and eucaine, I applied a piece of gauze, just large enough to cover the ulcer, soaked in pure formalin, allowed it to remain for a few seconds, then covered over with a small portion of oiled silk, and applied a bandage. In about twenty minutes he was able to walk to his home—about a quarter of a mile distant. He informed me on his next visit that he spent the evening and a greater part of the night walking up and down his bedroom floor to try and keep the pain under control. I saw him afterwards at intervals of three or four days, and applied some simple ointment on each occasion. In about two weeks the eschar separated, and soon after I applied a second application as before, but to a portion only; and to one or two spots where the margin seemed indurated, a third and fourth application. After this, it was left to heal, a process that was completed about the second week of July (a period of six weeks). He attended to his duties as an attendant in a library during the entire time of treatment. In this case, however, I did not use the morphia.

My reason for trying formalin in this case was the hopeful results I had previously obtained in another case of inoperable carcinoma of the neck. Previous to this I had not heard of its being used, successfully or otherwise, in cases of rodent ulcer.

CASE II.—Mrs. B., æt. 65, was sent up to me from the country by Dr. McQuaid, of Co. Cavan. She was admitted into Mercer's Hospital, July, 1901. The ulcer, of over fifteen years' duration, was situated on the forehead, and extended from ¼ in. from the margin of the hair to the root of the nose—about 2 ins. by 1⅓ ins. From the lower margin of the ulcer a diseased track or channel, about ⅛ in. wide, extended along the root and side of the nose to the inner canthus of the left eye, engaging a small portion of the upper eyelid behind the ciliary margin. An isolated patch was situated on the nose near its base. She declined positively to be put under an anæsthetic. I applied the same treatment as above on two or three occasions, substituting formalin-glycerine with tannin on the second and third occasion, to minimise the pain. There was a good deal of headache, some occasional rises of temperature, and œdema of the eyelids after each application. About the end of the second week a considerable portion of the frontal bone came away with the eschar, leaving the meninges clearly pulsating. I then strongly urged her to allow me to examine the diseased bone under an anæsthetic, but she persistently refused. She left hospital in August, the entire wound having completely covered over, but a small portion of indurated tissue remained over the eyelid, and along the side of the nose. She had promised to return, should the disease recur, which she did on May 28th of the present year.

I was agreeably surprised to find the wound on the forehead still healed with no sign of recurrence of the disease, except a small patch at the margin of the eyelid, where I had expected. But beneath the scar tissue covering the cavity left by the removal of diseased bone could be felt and seen a small puffy, fluctuating swelling, and the edge of the bone projecting and giving the feeling as if another portion of it had become semi-detached. This time I was able to persuade her to allow herself to be anæsthetised, otherwise, she was informed, no further treatment would be undertaken. Accordingly, on the following day, under anæsthesia, I laid open the scar for about three inches, exposed the bone, and opened the dura mater and evacuated about one ounce of clear fluid, resembling the exudate previously referred to. The bone was then scraped where it appeared unhealthy, the edges nipped off by a bone forceps, pure formalin was applied to the bone and the incised edge of the dura mater, the wound dressed and allowed to heal by granulation; this took some time, as it was three quarters of an inch deep and two inches in diameter either way. She left hospital on July 15th perfectly healed, but with a slight depression at seat of scar.

CASE III.—This patient presented himself at the out-patient department of Mercer's Hospital, in May of this year, a pitiable sight; he had sought admission elsewhere, but was told nothing could be done for him.

He gave the following history:—About five years since noticed a small pimple on the side of his nose, which itched and annoyed him occasionally, causing him to pick it with his finger nails; it continued to spread. He was treated first at a dispensary in Limerick for six months, next at St. John's Hospital, and as an extern of the same (Limerick) for about a similar period. He states he was treated by nitric acid in the first instance, but subsequently was treated for lupus and scraped. Later he found his way to Dublin, and was treated at Richmond Hospital, where he was "scraped"; returned again to Limerick, was again treated as an out-patient at St. John's Hospital, and continued so till he returned in May to Dublin.

As the appearance to the naked eye closely resembled lupus I decided before beginning treatment to have a section examined histologically; this Professor McWeeny was good enough to do, and pronounced it a typical case of rodent ulcer. You will observe that the greater part of the upper lip, the cartilages of the nose and soft parts covering them, had disappeared, except a flap on the left side, the bony framework of the nose was extensively engaged, the disease appearing to have extended to the posterior nares and upper part of pharynx. I told him that his case seemed well-nigh hopeless, but if he was able and willing to suffer pain, and left himself unreservedly in my hands, I would try what could be done. This he accordingly did.

Like the other patients, he would not consent to be anæsthetised, so I used a spray, containing equal parts of formalin and glycerine and tannin, to the nasal cavities; pure formalin to lip and edges of wound, having previously applied a solution of acöin. The pain seemed intense; I gave him a hypodermic of morphia a few minutes after; he was soon free from pain and asleep. A few days afterwards he was told a further application was necessary. He then consented to be put "asleep." He was removed to the theatre, anæsthetised with ether, the diseased portions, including the bones—as far as could be reached—thoroughly scraped, the indurated (folded) edges trimmed with a knife. A solution of supra-renal gland extract applied to stop oozing, then pure formalin applied as beforementioned. The inhaler was again applied for a few minutes, so as to keep up insensibility to pain; he was then dressed and returned to bed. This patient is still under treatment, but all diseased tissue has been removed and healing is quite satisfactory. During this man's convalescence a patient in an adjoining bed with whom he had some difference remarked one day, "You will never show your nose in Limerick again."

As this was the first time I had used formalin with an anæsthetic, I must confess I had some serious misgivings and fears as to the result, formalin being so volatile and ether no less so, and both coming in contact, nor had I previous knowledge or experience to guide me, but the results were all I could desire; by the time he had recovered from the effects of the anæsthetic there seemed to be no pain, this was borne out in the second case mentioned above. That patient, although 65 years old and very feeble and infirm, showed not the slightest unpleasant or dangerous symptom. The second patient was under ether three-quarters of an hour. In future I shall always give an anæsthetic where possible.

It may be asked what special action has formalin in such cases. My opinion is that the nucleus of the cell with which it comes in contact is destroyed—disintegrated, if you will—and so mitoses stopped; hence proliferation of these cells ceases. That it has some such effect even on truly malignant growths I have very little doubt, without in the least degree interfering with or impairing normal cells, but rather assisting the formation of scar tissue.

To summarise briefly, I have tried and seen almost all other methods of treatment that have been adopted, but do not consider that any other recognised method will give as good results.

The scar tissue that forms is smooth, does not contract, and soon comes so closely to resemble normal tissue as to be almost unrecognisable.

Formalin is practically non-toxic; this I have proved, at least to my own satisfaction, by injecting 25 minims of pure formalin into a large inoperable carcinoma of the neck, without producing the least injurious effects.

The time required for treatment varies, of course, with the extent of the disease, but may be put down as from one to two months, when the wound is allowed to heal by granulation; much less time might be required if a plastic operation were done.

The extreme pain which in the first case I found to be a very serious obstacle, can be readily overcome by anæsthetising the patient.

I have gone to some length in advancing reasons from a clinical point of view which occurred to me why rodents can hardly be considered truly malignant growths. If this view be still unaccepted, then may I be allowed to hope, nay to assert, we are at the dawn of a new epoch in the treatment of malignant disease.

It may be argued, three cases can prove nothing. My answer to that is—give me sufficient time and material, and I shall produce thirty-three, yea, or three hundred and thirty-three equally good results.

How formalin stops cell proliferation in diseased tissue or malignant growths, without destroying the vitality of normal cells, may seem incomprehensible, that it does so, I am fully convinced. But how? The answer is easy, if we admit a parasitic origin; without it, difficult.

Already I have trespassed too long on your valuable time and patience, and will now conclude with the hope that whatever you may think of the merits or demerits of the treatment brought under your consideration I claim no more than a humble and earnest effort, as the result of long thought and some anxious consideration, to do one man's part to contribute a quota to the relief of suffering humanity.

> "Still climbing after knowledge infinite,
> And always moving as the restless stars
> Until we reach the ripest fruit of all."

Since writing the above the author desires to add that he has had some most satisfactory results in the treatment of malignant growths. A further communication on the subject will appear soon.

Clinical Records.

A CASE OF ACUTE HYDRAMNIOS—PLACENTA PRÆVIA LATERALIS—TWINS FIVE AND A HALF MONTHS—MACERATED.

By Arthur N. Holmes, M.B., B.Ch., B.A.O.Univ. Dub., L.M.,

Extern Assistant, Rotunda Hospital, Dublin.

On June 2nd I was sent for to see a patient in the Extern Department of the Rotunda Hospital who was stated to be bleeding.

On arrival I found her somewhat blanched and weak, with a pulse of 140 and temperature of 101°.

On inquiry I found she had been bleeding on and off for a month past, and that on May 30th she had bled very considerably. The uterus, on palpation, I found the size of full term: tense, no fœtal parts to be made out or fœtal heart heard. Fluctuation wave easily elicited. Patient was having no pains and did not complain of tenderness during examination except for a handsbreadth above the symphysis pubis.

She stated, in answer to my question, that she was only five and a-half months pregnant, and up to three and a half days previously had been the normal size for that time, but that during the last three and a-half days she had grown with great rapidity. So much so, that she found considerable difficulty in respiration. How sudden the onset of the distension was, she pointed out, by the fact that, having gone to bed feeling comfortable she woke the next morning feeling very distended, and found she could not get her clothes to meet round her. After that she suffered from severe pains in the abdomen, increasing difficulty in respiration. and hæmorrhage, which eventually caused her to send to the hospital.

On vaginal examination, the anterior fornix was found very boggy. The external os barely admitted two fingers. A bag of membranes was felt, unruptured, and the hand, and cord, not pulsating, of a very small child found presenting. The membranes were quite flaccid. No placenta could be felt. As the hæmorrhage was continuous, though at the same time slight, chloroform was administered—which the patient took very badly owing to the dorsal-position exaggerating the difficulty of respiration—and the vagina plugged with sterile cotton-wool, and a T-shaped bandage and binder applied. The student in attendance was given directions to send to the hospital for me as soon as the patient began to get pains.

By this time I had made up my mind that the case was one of acute hydramnios—probably of twins, as the presenting sac showed no distension, and there was a previous history of twins on August 2nd, 1901—and possibly of placenta prævia. Concealed accidental hæmorrhage was, to my mind, excluded by the facts already stated, viz.:—

1. Absence of tenderness on palpation.
2. By the fact that if we believed the patient's statement that she was only five and a half months pregnant, it was inconceivable that she could have lost

sufficient blood to distend a five and a-half months' uterus to full term, and yet not be in a state of collapse.

3. The feeling the hand of the fœtus verified the patient's statement as to the duration of pregnancy.

At three o'clock, p.m., three hours after I had plugged the vagina, I received a message that pains had started. I went back at once and removed the plugs. The external os then admitted four fingers. The edge of the placenta was felt lying just above the internal os and on the anterior surface of the uterus. I then punctured the presenting bag of membrane, and little or no liquor amnii escaped. An arm prolapsed and was seized with ovum forceps. By sweeping the fingers along the back of the child a leg was caught and brought down, the arm then pushed up, and the child extracted without difficulty. It had been dead for about five days, and was about five and a-half months old. A second bag of membranes was then felt protruding through the os, very tense. I punctured as high as possible. and about ten pints of liquor amnii—very like ovarian fluid in colour—allowed to escape slowly, the fundus being carefully followed down. The second child was found presenting by the back: a foot was seized and brought down, and the child extracted. It was, like the first, dead, but had evidently died at a more recent date—probably two days before. The uterus contracted fairly well, but at the end of ten minutes smart hæmorrhage began, and, expression failing, a hand was introduced into uterus, and placenta, which was very adherent to the anterior wall, removed. In doing so a septum about an inch long was felt at the fundus. Uterus was curetted and douched, and contracted well. Temperature, 100·2°, and pulse 100 on leaving. In twenty-four hours the temperature was normal and pulse 99. After that, pulse fell to normal, and patient, after an uneventful puerperium, was discharged well on the tenth day.

The case is one of considerable interest on account of the great rapidity of the distension, and as the woman's history was spontaneous and very definite, I do not see any reason for doubting her. It is of interest also to note that McClintock's observation as to the polyhydramnion usually occurring in the second sac was borne out in this instance. Again, both children were males, and the same authority states that he found excess of liquor amnii more frequently with females than with males in the proportion of twenty-five to eight.

The placenta—a common one—did not show any pathological change, and there was no malformation of either fœtus.

It is by Dr. R. D. Purefoy's kind permission that I am enabled to publish the history of this case.

France.

[FROM OUR OWN CORRESPONDENT.]

PARIS, August 31st, 1902

ANTI-STAPHYLOCOCCIC SERUM.

AT the meeting of the Académie de Médecine Professor Doyen presented a new serum which, in doses of one or two drachms, acts against staphylococcic infection with such intensity that in two or three hours after the injection the pain caused by the inflammation has disappeared. The results vary, however, according to the method of injecting and the stage and extent of the central necrosis.

In boils and anthrax the injection made into the muscles of the hip or near the seat of the affection, if made before the formation of the core, determines the rapid cessation of pain, arrest of the inflammatory tumefaction, and a cure by resolution in twenty-four or forty-eight hours. If the core has been already formed, the extension of the inflammation is arrested and the gangrened tissue is eliminated in two or three days without pain through a small orifice of the epiderm.

In case of large carbuncles having the aspect of a diffused phlegmon, the speaker said that an injection of two drachms of the serum allayed the gravest symptoms in less than twelve hours. The suppuration diminishes, the necrosed parts are eliminated through small cutaneous orifices, and the walls of the abscess granulate so quickly that at the end of four or five days the wound is reduced to a simple loss of substance of the epiderm; large anthrax gets well without incision or cauterisations, under a simple antiseptic and emollient dressing.

But this is not all the advantage claimed by Dr. Doyen for his serum. A case of puerperal infection yielded in twenty-four hours, in spite of the grave general condition of the patient, and which would have taken eight or ten days of antiseptic intra-uterine injections to cure.

Perhaps the most remarkable case was that of phlebitis of the ophthalmic vein and the cavernous sinus complicated with the usual symptoms: double exophthalmia, total amaurosis on the left and partial on the right side, high fever and delirium. All the left side of the nose was transformed into an enormous phlegmon, and the suppuration had invaded the left orbit.

One injection of two drachms brought down the temperature and arrested in one night the evolution of intracranial accidents. The patient recovered, with complete amaurosis of the left eye and slight decrease of the vision in the right. This anti-staphylococcic serum acts on staphylococcic infection with the same rapidity as the serum of diphtheria on that malady. Its indications extend considerably beyond the treatment of carbuncle and anthrax. Tonsillitis due to staphylococci, bronchopneumonia where the same infection frequently predominates, osteomylitis and all infections in general where that microbe either exists alone or predominates, are modified with advantage by the same treatment.

Of the 200 injections which had been practised by Dr Doyen not one was followed by an abscess. In about 10 per cent. of the cases a slight general reaction was produced, and sometimes œdema of the face and ears, when the injection was made in the back of the neck for anthrax or carbuncle of that region. The point of election, however, was the lumbar region, and more especially the gluteal muscle.

In concluding his remarks, Mr. Doyen said that the serum acted as a specific on the staphylococcus, and from the cases above enumerated, and very many others which he had noted, it constituted in his mind an extremely important conquest for medical science, and for serotherapy in particular. The new serum permitted them to hope that a real progress was being made on the road of immunisation of infections which remained hitherto refractory to serotherapy.

Germany.

[FROM OUR OWN CORRESPONDENT.]

BERLIN, August 30th, 1902.

ONE of the contributions to the v. Leyden Celebration was a paper by Prof. Renvers on

THE TREATMENT OF THE DISEASES OF OLD AGE.

The most important changes of advancing age affect the circulatory apparatus, as well the vessels as the heart, and not infrequently the whole system is affected by an arterio-sclerotic process. Naturally the other organs and tissues also undergo the changes of old age. The most important of all pathogenetic signs is the failure of powerful reaction against external and internal damage. When all the other signs of fever are present there is no marked rise of temperature. With increasing age infective diseases give place to the diseases of tissue change that run a chronic course. The reason further lies in acquired immunity due to the cells overladen with products of tissue change affording an unfavourable soil. If infection occurs, as for example pneumonia, this runs in old age quite a different course from that in a young man. The rise of temperature is but slight, the sputum rarely characteristic, the expectoration slight, the slight acceleration of respiration frequently the only objective sign of some disease of the respiratory tract. The changes in the central nervous apparatus due to the intoxication are to the front (mild delirium, &c.). In old age almost all kinds of pathogenic bacteria may set up pneumonia. But the diplococcus decides the course rather than the form. In infective diseases in the old the excretion of noxæ through the kidneys, intestines and skin is arrested. A condition of chronic poisoning arises that manifests itself in increasing weakness, especially of the circulation.

In the matter of treatment, above all things the circulation must be excited. The equivalent of this is absolute rest; that position is the best that is the most agreeable. Further, warmed pure air must be provided, cooling of the body must be prevented by warm clothing, and the temperature of the room should be at least 68° F. Centripetal rubbings, friction with hot dry cloths, raising of the extremities influences the various stasis, hot foot and hand baths with mustard, hot partial washing of the skin, moist partial packings are an important support. Warm baths in old age are less suitable on account of the bodily exertion necessary for them, cold also on account of the extraction of heat. Mild massage is very stimulating to the circulation. Care should be taken of the bowels, and warm applications are useful in the stimulation of the abdominal circulation. Too free feeding should be avoided as it burdens the heart and vessels. Medicaments are best given subcutaneously; the caffein salt or camphor oil are the best, with, if necessary, the addition of ether. Digitalis, as a rule, is not well borne. Frequently, however, the end is attained by giving strong coffee or tea, with the addition of brandy or alcoholic drinks. Food must be given often and little at a time, more fluid or pultaceous than solid, more hydrocarbons and fats than much albumen. The old man lives through the administration of the daily caloria, and one day without food brings about a loss of power that may never be made good again. The mouth and pharynx should be cleansed with borax and glycerine as aphthæ are apt to develop. The food should be given warm and the solid parts minced. Spices and salt should be given freely; alcohol also on account of its stimulating action. Food is best given in the shape of well cooked meats, sugar, milk and cream. The required amount of albumen, 60 to 80 grms. is best given as an addition to the milk in the shape of somatose or plasmon. If necessary, food should be given by the rectum.

At the Society for Innere Medizin Hr. Albu showed two

Rare Preparations.

One was a benign gastric tumour after simple ulcer. It was a mucous membrane tumour, almost homogeneous, showing only a few inflammatory products embedded in between. It was therefore a simple adenoma. He had treated the patient five years before for gastric ulcer, and she had been discharged cured. After four years of good health, the symptoms returned a year ago with renewed difficulties. Rapid emaciation, dyspeptic symptoms, and vomiting.

Examination showed marked impairment of movement, free hydrochloric acid, and a tumour the size of an apple above the umbilicus. On September 2nd last year the tumour was resected. The patient had improved a good deal since the operation, and the symptoms had disappeared. 2. A countryman who up to a fortnight before had been strong and healthy, came to the polyclinic with cyanosis of the lips, nose, and extremities. Examination revealed myocarditis. There were also stenosing symptoms of the œsophagus, repeated free vomiting of blood, which the speaker thought to be due to rupture of varices in the œsophagus. On admission into hospital the symptoms improved. In delirium he escaped from hospital, but was brought back. The stenosis was now worse, but a sound in the œsophagus encountered no obstacle. After some days violent coughing came on, and after this vomiting, occurrences that seemed to point to a communication between the trachea and the œsophagus. The man then died quickly from asphyxial pneumonia. The autopsy showed grave myocarditis, a diffuse scirrhous carcinoma in the œsophagus, and further, just above the cardia, a small uncommonly flat ulcer, which proved to be carcinomatous. The speaker thought that in passing the sound, which was done with the utmost care, however, a small abrasion had been caused, into which particles of cancer matter had been carried. The condition was one of great rarity.

Austria.

[FROM OUR OWN CORRESPONDENT.]

Vienna, August 30th, 1902.

Three Obscure Cases.

At the "Verein Deutscher Aerzte," Altschul related the history of three very obscure cases.

The first was that of a female, æt. 17, strong and healthy, of a robust family. In her youth, however, she appeared to have suffered from a sort of "petit mal" attacks which gradually ceased to recur. In her fifteenth year she had what her parents called a "gland" fever, but since then, with the exception of a sore throat, she had been in good health.

When first seen her throat was slightly red and there was slight fever, but there was nothing to attract attention. After a time the fever increased and the glands in the throat and neck became larger, especially in the supraclavicular region. Aspirin and salophen in 0 25 gramme doses were given twice a day. A few days later she developed exanthematous urticaria involving the lower extremities, but there was no itching, this fact being more suggestive of a medicinal rash. These symptoms persisted, notwithstanding the treatment.

The temperature rose further to 38·6° C. (101.5° F.) the following morning; in the evening 39·6° C. (103·3° F.), and the pulse 80. By this time the symptoms pointed to typhoid fever, as the tongue was dry and coated, but no roseolar symptom was present to confirm the diagnosis, neither was there enlargement of the spleen, nor diarrhœa. The urine was healthy in colour, and about a litre was passed in the twenty-four hours. Widal's serum test was applied, but the result was negative.

On the mucous membrane of the throat a few streptococci were discovered. The fever continued for five weeks and then began to subside; in another week she appeared to be convalescent, and she ultimately recovered perfectly without the nature of the disease having been discovered.

The second patient was also a female, æt. 16, who had always been healthy. She was taken suddenly ill after bathing in the river Moldeno, with persistent vomiting and slight fever. The vomiting continued for eight days, with some fever, when it gradually ceased and convalescence set in slowly. A few weeks later, however, the hair to began to fall out rapidly in alarming quantities.

Various diagnoses may be suggested in this case; it may have been typhoid fever, gastro-enteritis, polluted water intoxication, gastritis mycotica, or simply chemical intoxication from the river water. In Prague during the bathing season these cases are not uncommon. The data are insufficient to adopt the *post hoc ergo propter hoc* view, and because it occurred after bathing it need not necessarily have been the water.

The third case was one of "febris ephemera," occurring in a perfectly healthy female, æt. 26. She was taken suddenly ill one evening, with severe shivering and great pain in the head. The latter yielded to an antipyretic, and next morning she was perfectly well. The cause of these fevers, he observed, was very enigmatical, and it was questionable whether the antipyretic acted as an antidote to the poison, which did not agree with experiments in animals.

Epstein, in criticising the cases, said his opinion was that the first case was one of erythema nodosum, which in young persons very frequently resembled typhoid fever. The long continued fever might be partially of a hysterical nature, a possibility which must never be lost sight of in such cases.

Nachod said that such cases often occurred in children, in whom the fever was continued for a very long time in strumous conditions where suppuration and degenerative cheesy changes were taking place in the glands in the region of the mediastinum or in the bronchi. When it occurred in the thyroid or superficial glands the cause can be demonstrated, but when deep the disturbing cause was not so perceptible.

Pick agreed with Epstein in diagnosing the first case as one of erythema nodosum. He was also at variance with Altschul in looking upon Widal's reaction as an element of diagnosis in typhoid fever, as he considered it of no value whatever in differential diagnosis. The two reactions that were of any value in this disease were the Diazo reaction and the enumeration of the leucocytes in the blood. The use of antipyretics in fever was a return to former doctrines which taught us to keep the temperature down by force and low diet, but the latter should not be long practised or the patient might be brought too low. In opposition to this method of treatment Curschmann advocated "feeding"—"good feeding"—as the proper treatment of typhoid fever.

Altschul, in reply, said he could not accept the theory of the first case being one of erythema nodosum, as no external exanthem or nodules were at any time observed. The suggestion of a "cryptogenetic septicæmia" in which such exanthemata are suppressed is a very enigmatical diagnosis to entertain. As to the suggestion of tuberculosis of the lymphatic glands that might be dismissed as the history, speedy recovery and present healthy condition disproved it.

NEUROTIC DISTURBANCE IN A MANGANESE WORKER.

Jaksch presented three patients who were engaged in the manufacture of permanganates all suffering from nervous symptoms, such as paresis, paræsthesiæ, exaggerated reflexes, ataxia, and defects of speech. No trace of manganese could be found in the urine.

Although grave suspicions attached to the trade he was not inclined to accept the toxic effect of the metal as the cause. He thought the cause would more likely be discovered in the conditions or nature of the work, such as the exposure to heat during the period of employment, as for instance the plates which are handled have a temperature of 120° Cent. (or 248° Fahr.) which are held at a distance from the head and keep that organ at a temperature not more than 4° less than that of the metal itself, which he thought was enough to account for the nervous troubles. Another reason for entertaining this opinion was that among the large number of hands employed very few were thus affected.

In connection with this case he recorded his experience of a man engaged in working cyanide of mercury, who finally died from uræmic poisoning. Before the uræmic symptoms appeared he had examined the blood from time to time and found 0·04 of a gramme of uric acid, and at a later period 0·6 gramme, or 9·2 grains per cent. These results confirmed the long established opinion that the symptoms of toxic uræmia were in proportion to the uric acid in the blood.

MULTIPLE UNILATERAL CEREBRAL AND CERVICAL PARALYSIS.

Walko showed a patient with multiple paralysis of both cervical and cerebral nerves, which he diagnosed to be due to a tumour in the cerebellar fossa.

Czernaak was inclined to question the diagnosis in this case on account of its long duration, *e.g.*, thirty-two years. He thought the more probable cause of the multiple paralysis was due to an aneurysm.

Piffl observed, after examining the patient, that he had suffered from a fœtid discharge from the left ear, which on careful examination was closed up with a bluish red swelling, this being an indication of the presence of a cerebral tumour.

Continental Notes.

[FROM OUR SPECIAL CORRESPONDENT.]

CONTINENTAL CRUSADES AGAINST ALCOHOL AND CORSETS.

Two Continental "crusades" seem to have come to stay. First, in France, the anti-alcohol agitation, favoured as it is by an increasingly large proportion of leading intellectual spirits of the day, including many able young men, medical, clerical and literary. To those old enough to recollect the earliest temperance associations in England, the present French movement appears to have much resemblance to that so-called "moderation" movement which preceded those more thorough-going total abstinence societies, unintentionally nicknamed by one of their stalwart but stuttering advocates, "t-t-tee-total."

The second crusade is of Germanic origin, and is against the wearing of *Corsets!* Previously we have heard rumours of a somewhat similar aristocratic advocacy of dress-reform in Vienna, but it was apparently too rational a reform to take root permanently in the frivolous fashionable Austrian metropolis. The present German idea, on the contrary, is taking hold of the well-to-do and substantial middle classes of Westphalia, Saxony, and Rheinland. Seated in the restaurant of the cosy Savoy Hotel, in the Central Railway Square of Frankfort, we could not but overhear this anti-corset controversy loudly and warmly argued pro and con by several professors and others, who finally adjourned to the Palm-Gardens of Frankfort to see the anti-corset garb in actual wear. Having become interested in the discussion we also went to these gardens, accompanied by an Alsatian physician, enthusiastic for the new "costumes hygieniques."

On arriving at the handsome Palm-Gardens, crowded as usual on the Sunday evening, we witnessed various illustrations of the new costumes, ample corsages, short robes, boleros, &c., &c., worn without rigidity and seldom well-fitting, but evidently cut and made to be so worn, quite independently of all Parisian fashions—young maidens and comely matrons, dressed in colours and materials of all kinds, and without whalebones or flowing skirts.

The good doctor joyously pointed these out to us; saying, "Our German physiologists have declared *une guerre à outrance* against the corset principally and to the long dresses trailing on the ground, as detrimental to the health and hygiene of woman. We have made, now over a year, an ardent campaign on behalf of a costume more conformable to the free movement and the normal development of these delicate beings who delight in toilettes. We write articles daily on the subject, interview and interest physicians, scientists, artists, authors; and, above all, we hold conferences, often numerously attended. And," he confidently added, "we shall triumph, for already many of our most influential and elegant country-women are braving the ridicule following first attempts, and are demonstrating practically, as you now see for yourself, the good sense and the salubrity of a costume which gives both at home and on the promenades, liberty of movement without oppression, and a faculty of free breathing so essential to health. We will free Germany of *jolies poupées* deformed by coquetry and literally dying of compression. You have only to see the body of a woman on an anatomical table to comprehend at once the crimes committed by modern toilettes, which compress and deform the trunk to the great detriment of all primordial organs."

INCREASE OF WOMEN MEDICAL STUDENTS.

Yet a third interesting change on the Continent (we cannot call it a "crusade" but possibly a *conquest*) is the notably increasing percentage of female students in the *medical* schools of the Swiss universities. The following figures seem to portend a "turning of the tables" in the next generation. It may be mentioned that in some cities the number of female medical students has already overpassed the number of male medical students, as at Berne, where there are now 190 female medical students against 174 male students; Geneva, more conservative, has 183 male to 163 female students. The total number of women students of medicine at all the Swiss universities is 511.

The Operating Theatres.

WEST LONDON HOSPITAL.

Nephrectomy for Suppurating Kidney. — Mr. **Swinford Edwards** performed the above operation for a man, æt. about 38, who had suffered from stricture of the urethra since he was a boy. At the age of seven he sustained an injury to the urethra, which soon resulted in stricture, for which lesion he had undergone internal urethrotomy on four separate occasions. External urethrotomy had also been done. The patient had always found it difficult to maintain the patency of the passage by means of the bougie, owing to an excessive sensitiveness of the urethra. Some four months previously he had been admitted into St. Peter's Hospital under Mr. Edwards, in a very critical condition, with a large and tender swelling in the right lumbar region, which was evidently renal. There was considerable fever, and the urine was scanty, with a copious deposit of pus. Nephrotomy was at once performed, and three separate abscesses opened and drained. The condition of the patient was then such that Mr. Edwards considered that the removal of the organ would prove fatal. The patient was much benefited by the operation, and left the hospital with a couple of discharging sinuses about a month afterwards. Ten days ago he was admitted into this hospital with the object of removing the kidney, if possible, as the renal abscess was still discharging through a sinus in the loin. Micturition was difficult, and the stream very small. The urine was loaded with pus and very foul. The patient was almost bedridden, looked very ill, and had a temperature ranging from 99° to 101°, and a rapid pulse. Evidently the first thing to be done was to provide a free outlet from the bladder. So Mr. Edwards again performed an internal urethrotomy, afterwards passing Lister's sounds. The bladder was well washed out with 1 in 10,000 sublimate solution. The patient stood the operation well and was much benefited by it, and Mr. Edwards thought the time had arrived for the removal of the suppurating kidney. The patient having been anæsthetised, prior to turning him on his side a series of steel sounds was passed to ensure a free urethra. The usual lumbar incision was made and the sinus dissected out. A considerable amount of dense fibrous tissue had to be cut through before the kidney could be exposed. It was then found a matter of some difficulty to free the kidney, or what remained of it, from the strong adhesions all around. The pedicle was transfixed and tied in two parts. After having separated and tied the ureter a few bleeding points had to be secured in the stump, but really, considering the extent of the operation, but little blood was lost. During the operation, and especially when the kidney was dragged upon the patient showed signs of collapse, but rallied again after the subcutaneous injection of strychnine and a brandy enema. The operation was completed by the insertion of a large rubber drain and the application of the usual gauze dressings. Death ensued about three-quarters of an hour after his removal to the ward, during the process of transfusion. Mr. Edwards remarked that it was to be regretted that the patient had not sought relief sooner than he did on the occasion of his admittance into St. Peter's for renal suppuration, when a nephrectomy might possibly have been performed with a better result.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, SEPTEMBER 3, 1902.

LUNACY IN 1901.

The annual Report of the Commissioners in Lunacy is a document of interest and importance to the medical as well as the lay community. It registers the facts of mental disease in a way that enables the observer to compare practical results with theoretical opinions. There can be no doubt that the scientific study of lunacy is leading up to conclusions that will be of the utmost value to mankind, inasmuch as it tends every day to clear up the doubts that have so long surrounded this special branch of professional work. A specific instance of that kind of advance is afforded in the bold speculation that some forms of mental aberration are due to septic disturbances of the brain matter. Here, again, we are brought face to face with the ubiquitous microbe, which is the parent of such multifarious and far-reaching toxic irritations in the human body. What would have been thought of a man who a short generation ago ventured to prophesy that madness might in some instances be due to the invasion of the body by micro-organisms? To-day, however, that proposition appears to be supported by a reasonable amount of evidence. It need hardly be said that anything which tends to reduce the amount of lunacy will be of unspeakable value to mankind. Of late years there is little doubt that lunacy has been on the increase. That fact is supported by the figures in the present blue-book, which is the fifty-sixth that has been issued by the Commissioners. The total number of notified lunatics in England and Wales on January 1st, 1902, was 110,713, being 2,769 more than on the corresponding date in 1901. This increase compares with an increase of 1,333 in 1900, one of 1,525 in 1899, and one of 3,114 in 1898. The average annual increase in the ten years ended December 31st, 1901, was 2,286, and in the five years ended the same day, 2,270. The increase in 1901, therefore, exceeds the average annual increase in the preceding ten years by 483, and that in the preceding ten years by 500. It is interesting to note that there is an increase in the proportion of private as against pauper patients, a fact which the Commissioners attribute mainly to the increased provision made in asylums for the better class of patients for whom moderate rates of payment can be afforded. The main results of modern lunacy treatment may be broadly taken from the statement that no sustained advance has taken place in the recovery rate during the past thirty years, but there has been an important diminution in the death-rate. The Commissioners cannot attribute this lessened mortality to any single agency, but there can be no doubt, they think, that the main causes are improved sanitary conditions in asylums, better nursing of the sick and infirm, and the more earnest endeavours in recent years to render the lives of the insane under detention more happy. As to the influence of occupation, we find for the five years from 1896 to 1900 inclusive that the yearly average of clergymen of the Established Church was 30; medical men, 30; barristers, 6; solicitors, 19; civil servants, 49; artists, 18; teachers, 35; authors and editors, 23; musicians, 26; actors, 14; soldiers, 263; bankers and bank clerks, 321; commercial travellers, 178; agricultural labourers, 480; butchers, meat salesmen and grocers, 237; and other handicraftsmen, 515. It is a most interesting sign of the times to note of Broadmoor Criminal Asylum that in that colony of troublesome and dangerous patients there has been no employment of mechanical restraint throughout the year. Altogether, this Report registers an important stage in the practical treatment of lunacy.

DIAGNOSIS AND PROGNOSIS.

Thanks to the progress which sciences germane to medicine have made during the last half century, diagnosis has become far more exact than was possible when so little was known with regard to the correlation of groups of symptoms and pathological changes. We owe this advance in great part to the encroachment of the surgeon on fields previously regarded as exclusively medical, his ante-mortem examinations having thrown a flood of light on associations which were previously merely suspected

The greater perfection of the instruments which enable us to obtain precise knowledge in regard to organs and tissues which are hidden from sight and are with difficulty accessible to ordinary methods of exploration has also conferred upon diagnosis the precision which is indispensable to accuracy of deduction. In the matter of diagnosis the physician is on tolerably sure ground, and although, since the personal equation can never be ignored, mistakes are still possible, they are for the most part attributable to want of care or inability to appreciate the significance of data. So far, the physician is on fairly solid ground, but it is quite otherwise when he ventures to forecast even the near future. Here he is reasoning from the known to the unknown, and, metaphorically speaking, he has only one foot on the ground. The most experienced physician, when he formulates a prognosis in a given case, can but enunciate the doctrine of averages, and in virtue of that doctrine he is doomed in a certain proportion of cases to fall into error. Yet after the initial question which every patient addresses to his medical adviser, "What is the matter with me?" he is almost sure to ask, "What is going to happen?" and the question is one which it behoves the practitioner to answer with the greatest prudence. No physician is long in practice before he discovers that, as Voltaire once observed, nothing happens but the unexpected; the most trivial affections, in apparently robust patients, end disastrously, while others, obviously more severe, recover. The old physician who said he never acknowledged that a patient was dying until he was dead, was at any rate on the safe side, and much might be urged in favour of this attitude, which is in every way preferable to that of the pessimistic physician who ruthlessly declares the case to be hopeless from the onset. Such an attitude, even if justified by events, has the incontrovertible drawback of depressing the patient and of discouraging those in attendance upon him. The physician ought to be a man of sanguine temperament, but he should not allow free play to this temperament in the matter of prognosis. Bearing in mind the large number of factors which must necessarily escape his observation, he will take care to temper the optimistic character of his utterances to the patient by more guarded remarks to the friends. Symptoms and signs tell what is, not what will be, and the physician must cultivate the faculty of never being surprised at anything, but of quietly expecting everything. Room must always be left for the chapter of accidents, and in medicine death is the accident. To foretell the duration of a labour is like foretelling the arrival of a ship in port without knowing at what speed it will travel or what route it will follow. The only thing to say is that the vessel will reach the port eventually if nothing intervenes to hinder its course. What more can be said and what more can be expected? Prognosis cannot be an exact science, since we are never in possession of the data which are indispensable to a trustworthy forecast.

ERYTHROMELALGIA.

Of the two rare, interesting, and curiously contrasted diseases, *erythromelalgia* and *Raynaud's disease*, the former owes its birth and baptism as a new disease to Dr. Weir Mitchell, who, in his original description, tells his readers that "Erythromelalgia is a chronic disease, in which a part or parts of the body, usually one or more extremities, suffer with pain, flushing and local fever, made far worse if the parts hang down." The less rare condition of Raynaud's disease is one in which the extremities present a *symmetrical* display of indications of profound vascular and nutritional disturbance, in which pallor, congestion with lividity and local gangrene, are the characteristic features—in effect, "a local syncope, a local asphyxia, or a local death." Dr. Skirving, of New South Wales, recently showed a case of the latter condition in a miner, æt. 36, of neurotic temperament, who had lived a life of hardship and exposure, but without specific history or existence of discoverable organic lesion. He attributed his condition to the fact that he had "worked in wet claims." Eighteen months before he began to notice that both his feet at times "went dead." They became pale, sodden-looking, and cold to the touch. At the same time tactile, painful, and thermal sensations were equally blunted. There was never any dissociation of sensibility, such as is sometimes met with in other neuro-trophic lesions, of which syringomyelia is an example. There had never been much pain, seldom any cyanotic lividity, and never an approach to gangrene. A patient suffering from erythromelalgia was shown to emphasise the contrast. He was forty years of age, and was also neurotic, perfectly temperate, and without specific history. His present trouble commenced last autumn, after a long period of overwork and worry. He first noticed pain and throbbing in the left fingers, and uncomfortable sensations in the hands developed by degrees. Tactile sensibility appeared somewhat heightened; the other sensations remained normal. The fingers became red and hot; at the time of exhibition they were "somewhat swollen"; and they "show at times a tense, rosy glossiness." All the conditions are aggravated when the hand hangs down. Stress is laid on the fact that no stage of pallor preceded the hot, flushed condition of these left digits. There is some loss of muscular power, and there is diminished response to both forms of electric current, especially the faradaïc. When the affected fingers develop their full tint of rosy redness they sweat profusely The symptoms are least troublesome in the morning and increase towards night. Those two cases of rare disease are indeed curiously contrasted. The symmetry of the one and the asymmetry of the other are almost as definitely opposed as the vaso-constriction of the former and the vaso-dilatation of the latter. With regard to the primal origin of the conditions, it is probable that in the case of Raynaud's disease the view first propounded by the discoverer still holds its own, viz., that the vasomotor centres are unduly irritable, and that the exciting cause is usually from the periphery, for example, cold, and that efferent impulses from the centre lead to paroxysmal contraction of the arterioles. For erythromelalgia, the nearest approach to a satisfactory explanation of the conditions present—although by no means a perfect one—is offered by the suggestion of peripheral neuritis of vaso-motor fibres only.

Notes on Current Topics.

Mysophobia.

As the poet says, "Everybody worth a straw Has in him got some little flaw." In a fairly numerous class of persons this flaw—for all excess is a flaw—takes the form of an extreme horror of dirt—morbid fastidiousness—which a learned Frenchman has labelled "mysophobia." We are all familiar with victims of this special "phobia," though not under this scientific name. A person suffering from mysophobia, on taking his seat at table, begins by scrutinising closely every article placed there for his use; he holds his tumbler up to the light to see if it is free from finger marks, he scans his napkin to make sure that it is immaculate, and one by one each object is critically passed in review. In advanced cases the sufferer mechanically wipes the various articles, using the napkin for the purpose. In persons of a certain social standing mysophobia is a troublesome complaint—not to the victim, but to his entertainers. In a domestic servant, on the other hand, the affection constitutes a desirable quality, but unfortunately it is extremely rare in the servant and working classes. The prognosis is grave in the sense that the sufferers rarely recover, the tendency being for the affection to become more and more pronounced with advancing years.

A Typhoid Fever Prophylactic.

THE scourge of all modern armies is typhoid fever, and during the South African war the British lost more men from the disease than from the Mauser of the enemy. Yet the Boers practically suffered nothing from the disease, although their surroundings at Paardeberg were as insanitary as any camp could be. They had no drugs nor ambulances there, and very few of either elsewhere. General Lucas Meyer ascribes this immunity to the use of buchu, the value of which they learned of the natives. Buchu, bookoo, or bucku, was introduced into this country in 1774, and was in 1797 the subject of a monograph by C. J. Penz. Its medicinal virtues were extolled by Reed in 1824, since which time it has found a place in medical practice. Its value in chronic diseases of the genito-urinary organs, pyelitis, cystitis and vesical irritation are known to all practitioners. From chemists we have learned that the leaves yield a volatile oil containing about 30 per cent. of a crystalline diosphenol, together with menthone and a hydrocarbon. But no notice was taken of Burchell's description of the use of the leaves by the Hottentots, who used them for almost every disease. Waring states that the leaves possess tonic properties, but he is almost alone in that opinion; yet if taken in large quantities as Thompson recommended, it might reasonably be supposed to affect the alimentary canal, as given in ounce doses three times a day it is eliminated by the kidneys. The fact remains that the Boers on the veldt, according to General Lucas Meyer, had not a case of typhoid fever, and they ascribe their freedom from the disease to the use of buchu, as recommended by the Hottentots to the first Dutch settlers in the Cape. Whilst the subject is fresh in the minds of those who took part in the war we think some inquiries should be made to test the accuracy of the statement. It seems strange that the loyal British of Cape Colony and Natal should be ignorant of the valuable therapeutic properties of an indigenous plant, and we should consider it incredible were it not that for centuries the properties of digitalis remained unknown to the medical profession in England until Dr. Withering learnt them of an old woman who lived by curing dropsy with foxglove tea.

Relief *vice* Cure.

SOME of our nursing and drug-trade contemporaries have waxed facetious or censorially critical in respect of the practice of treating such a disease as pulmonary tuberculosis by cough medicines, digestives, and stomachics. Their attention was apparently directed to the subject by some remarks made by Dr. Arthur Tatham in a paper read before the Hunterian Society, in which he alluded contemptuously to the idea of obtaining a "cure" by any such means. But who anticipates a "cure" from this or any other purely medicinal treatment? Certainly not the intelligent practitioner, who knows full well that tuberculosis is not to be conjured by pills and potions; possibly the patient takes a sanguine view of his prospects, but even he, poor man, hopes rather than believes. Moreover, is it not the recognised duty of the physician to seek to mitigate the symptoms of diseases admitted to be incurable? And can it be denied that the administration of "some pernicious form of opium" tends to assuage the discomfort of the night-cough, just as a gentian-and-soda mixture restores the appetite? Does not the sufferer gain in weight and comfort under the administration of malt and oil? Are we not to give morphia to allay the pain of biliary colic merely because its effect is not curative? To the editor of the *Hospital* it may appear amusing to assert the descendance of symptomatic medication from witchcraft and sorcery, forgetful of the fact that when disease has reached an advanced stage palliative measures are the only means available, not to avert the inevitable but to prevent the preventible. There is no analogy between treatment directed to the relief of pain and recourse to "patent medicines" of unknown composition and uncertain action, and to assert that there is infers a singular inability to grasp the facts of the case.

The Bacteriological Diagnosis of Typhoid Fever.

Drs. Ferdinando Strado and Agostino Pasin have recently commented on their experiences of the value of Pioskowski's method of bacteriological diagnosis of typhoid fever. The method is as follows:—Normal human urine, of a specific gravity of 1020, is allowed to become alkaline spontaneously for from twenty-four to forty-eight hours; is peptonised with ½ per cent. of peptone; is then treated with 33 per cent. gelatin, by boiling over a water-bath for an hour; is filtered without the addition of heat; and is then poured out into test tubes. It is then sterilised at 100° C. for fifteen minutes, and on the next day a second time for ten minutes. According to Pioskowski, colonies of typhoid bacilli may be differentiated in this medium after twenty hours from those of the *bacillus coli* by the presence of long processes in the periphery of the colonies, prolongations which may reach to a length double that of the diameter of the colonies. In twenty out of twenty-two cases, positive, &c., salts were obtained by the employment of this method. The cultures must be maintained at a uniform temperature of 22° C., because a higher temperature causes liquefaction of the gelatin, and a lower one retards the development of the germs. The urine of individuals who have been placed on a purely vegetable diet should alone be employed in this method. The degree of alkalinity should not exceed a certain limit; so that the medium, after the addition of the gelatin, shall have but a very slightly alkaline reaction. The cultures employed must be fresh, as the differentiating characteristics disappear from old cultures.

Leeches in the Larynx.

The custom of drinking directly from streams and small lakes in France, Germany, and Italy, not infrequently enables leeches to find their way into the human organism. M. Rueda has collected some twelve such cases, two of which occurred in his own practice. Of these one was a country patient, who for five days had been suffering from dyspnœa and spitting of blood. In an attempt to catch the leech with a forceps a violent paroxysm of coughing was induced, during which the leech was expelled. Dr. Healy, I.M.S., reported in 1838 the successful removal of four leeches from the pharynx of a patient who had drunk some turbid water some days before. M. Billon, Clementi, Perez, and others, have published cases of their presence in the larynx, and Dr. Neale *(Medical Digest)* enumerates quite a number of such cases. One of the great dangers of leeches in the air passages is the passage of blood into the finer bronchi causing pneumonia. They should therefore be removed as soon as possible. Tracheotomy is very seldom necessary; when seen they may be withdrawn by a laryngeal forceps, though they are sometimes difficult to pull from their attachment, especially if they have just commenced to bleed; in these conditions M. Billon and M. Villions found that a whiff or two of tobacco smoke caused them to loosen their hold and to be expelled by the coughing the tobacco smoke caused.

Heat as an Antipruritic.

Professor Edmund Andrews, of the North-Western University, Chicago, recommends the application of heat—as strong as can be borne—as an effectual means of obtaining relief in the very troublesome and very persistent itching of pruritus ani. He was led to its adoption by the way in which he had seen northern farmers in the winter treat their "acute pernios," or chilblains. Those formations have regular periodical exacerbations of pruritus. "Once in twenty-four hours they awake into special activity, and afflict the patient with violent itching, which lasts some two hours or more." The patient at the onset of this itchy paroxysm exposes the chilblains to the greatest heat he can bear by taking off his boots and stockings and holding the affected toes opposite the red-hot coals of his stove. After each pernio has received this attention for a couple of minutes the patient feels no more itching there for the day. Dr. Andrews has devised an ingenious form of (closed) pipe through which a continuous flow of hot water can be maintained by a tube connected with an elevated reservoir. An axial outflow current is provided for by a tube placed similarly to that of a soda-water syphon. The investing closed cylinder is inserted to a distance of two inches beyond the anal margin. The highest temperature which can be tolerated is about 130° F., but many patients cannot bear a temperature above 125°, and he has never found any one who could endure 140°. The results are always soothing and it is claimed to afford more than mere temporary relief.

The History of Cannabis Indica.

Since O'Shaughnessy sent to his friend Dionysious O'Donovan, of Dublin, some specimens of the cannabis indica and of its preparations, and especially since the publication in 1839 of his great work, "On the Preparation of India Hemp," the drug has held a place in the physician's armamentarium. Withal it is an uncertain therapeutic agent, uncertain in the sense that its preparations, as they reach the physician, give very unequal therapeutic results. Its physiological effects sometimes justify the native names, "increaser of pleasure," "exciter of desire," "cementer of friendship," and the "laughter-mover." At other times it seems inert. Christison, in 1851, published a very able and interesting contribution to the therapeutical history of the drug, and soon after G. Martins issued his essay "Pharmakologisch-medichinische Studien über den Hanf," and in 1870 Clouston's "Observations on the use of Cannabis Indica in Insanity" appeared. We have referred to these distinguished writers to show the hold that the value of the drug had upon independent and practical physicians. The profession to-day is in no sense lacking in interest in this valuable drug, and during the Pharmaceutical Conference in Dundee "cannabis indica" was the subject of a series of very valuable papers—papers that offer a hope that the uncertainty of action of the drug will be practically unknown to the coming generation of medical practitioners. Dr. Marshall's review of recent work in this direction is not only an excellent summary, but it is a readable and valuable account of our existing knowledge on the subject. He advocates the use of the potent and stapie charas for making preparations, and would dispense with the official ganja. Charas is the resin obtained from the flowering tops of cultivated female plants. It forms a greenish-brown, moist resinous mass. Ganja, hitherto considered to contain the active therapeutic property of the plant is also obtained from the flowering tops of the female plant, deprived as much as possible of leaves. To decide on the relative values of these preparations the effects should, as O'Shaughnessy practised, be tried on the lower animals. And as gunja is known to deteriorate by keeping, O'Donovan's suggestion that the medicinal preparations should be made in India from the fresh plant might be acted on with good results.

The Abuse of Hypnotics.

One of the pitfalls for a young practitioner is the use of hypnotics. He commences confident in his power of curing pain. All around him he finds sedatives and hypnotics. To the list of the old narcotics which exercised Harley's classic pen is added the abundant supply of the synthetic class of chemicals. And yet how powerless the practitioner feels at the bedside of a maniacal patient for whom sleep is a necessity of life. Then for the first time perhaps he finds the truth of Sydenham's advice, "prescribe for the patient." The high fever, the staring eyes, the wild mutterings are indications not for the ordinary hypnotics old or new, but for the administration of some therapeutic agent to lessen the frequency of the pulse, to lower temperature, to abate the violent headache, and induce natural sleep. For such cases hypnotics are of no use. The disturbed action of the heart must be corrected, the arterial tension diminished, the skin made to act. The choice of the prescriber lies between aconite and green hellebore, and the dose should be small and repeated every five minutes until the effect of the drug is seen. Of aconite, two-drop doses repeated for twelve or even twenty times. When prescribing green hellebore, Norwood's tincture may be given in one-drop doses until the patient vomits or the physiological effects are produced. The action is similar to that produced by the antimony draught of Graves, which we have lost the art of prescribing.

Bifid Scrotum.

An unusually interesting case of this congenital deformity, in a man forty years of age, was recently published. The division passed from before backward, two distinct pouches being formed. As in the majority of such cases the man was a hypospadian, the urethral opening was small in extent and close to the extremity of the penis. The peculiarity in this particular case is that the deformity is associated with such little malformation. Fissure of the scrotum associated with cryptorchidism, a not unusual teratological condition simulates the vaginal orifice; the scrotal portion resembling the labia majoriæ, and such deformed persons are often exhibited to the public as hermaphrodites. It is sometimes a matter of difficulty to secure positive evidence of their sex, as in the case of Caspar's patient, K., who lived for thirty years as a woman, and would probably have died in ignorance of his sex had not the great medical jurist been consulted. The error in not recognising the sex is probably due to the fact that such persons seldom have a distinctive masculine appearance, and the condition closely resembles cases of enlargement of the clitoris, which are less infrequent than is commonly supposed.

Poisons and Race.

It is an interesting study in anthropology to inquire what are the commonest substances used in different countries as poisons. Thus, in this country, one would probably think of carbolic acid, opium, and strychnine, as among the most usual drugs employed with suicidal or homicidal intent. The first mentioned is perhaps responsible for more deaths than any other drug in recent years, though this is due to the ease with which it can be obtained. In France the commonest form of suicide is, of course, poisoning by carbon monoxide and dioxide gas from a lighted brasier. The report of the Chemical Examiner for Madras for the year 1901, recently published, gives some interesting information as regards the poisons used in India. Thus, among ninety-two cases of poisoning which came under inquiry, in only one was carbolic acid the agent used. Strychnine is commonly used, as are also arsenic, mercury, madal juice, oleander and opium. In two cases aconite was employed, and as it is the duty of the examiner, where aconite is suspected, to satisfy himself of its presence by an experiment on himself, his post is certainly no sinecure.

The Treatment of Burns.

The correct treatment of burns has always led to considerable diversity of opinion among surgeons, and there are few simple injuries in which the results of treatment are so commonly unsatisfactory. This is due to the difficulty of devising any line of treatment which is at once comfortable to the patient and conducive to speedy healing, and the individual surgeon usually errs in one or the other direction. In former times, before the antiseptic system was fully applied to surgery, the tendency was almost wholly to such treatment as was pleasant to the patient, while nowadays it is usually in the opposite direction. An American practitioner, however, claims to have followed out for some years a plan which fulfils all the requisites of successful treatment. Among a list of "nevers" appear: Never use a dry dressing, never forcibly remove the skin, never use oils, never change dressings frequently. One could hardly sketch a system more opposed to the old routine when "never wet a burn" was the basis of practice and carron oil the staple dressing. This treatment is simply the application of wet antiseptic dressings on the ordinary principles of the surgery of wounds.

Electrical Anæsthesia.

At the last meeting of the French Academy of Sciences, M. Leduc called attention to an ingenious method of inducing anæsthesia by means of the electric current which may possibly prove of service in respect of human beings, although, so far, it has only been tried experimentally on animals. The constant current is applied to the shaved head of the animal through an interruptor giving from 150 to 200 breaks a minute. The electromotive force is gradually but quickly increased until the body is thrown into a state of tonic contraction, when the animal falls down and respiration is suspended. The current is then reduced until respiration is restored, and at this stage the animal is in a state of quiet narcosis, cerebral activity being entirely suspended. This unconscious state can be maintained for at least two hours without injury, and consciousness returns as soon as the current is cut off. Not only has the experiment no injurious effect, but the animals were often particularly lively as if under the influence of a stimulant. When applied in the manner indicated, that is to say, quickly, the sensation, as far as one could judge, was not disagreeable, but when, on the contrary, the strength of the current was increased very gradually the animal passed through a period of clonic spasm. The current recommended is one of from 12 to 20 volts with 2 to 10 milliampéres intensity, and about 200 interruptions per minute. By this means, moreover, perfect anæsthesia of the region innervated by a particular nerve trunk can be painlessly obtained.

Hyperpyrexia.

Dr. L. Achard reports an interesting case of hyperpyrexia in a patient who had no pathological symptom other than slight bronchial rales. On taking the temperature in the arm-pit he was astonished to find it 108·6° F.; and in the evening of the same day it stood at 104° F. The following day the patient was visited by Dr. Achard and some medical friends, when the temperature was found to have reached the extraordinary figure of 110·5° F. It now commenced to fall, and two hours later stood at 104° F., and in the evening the thermometer recorded 102° F. Twenty-four hours later the fever gradually subsided, and the temperature became normal without any untoward symptom. In the anxiety to discover some morbid condition of the lungs the hyperpyrexia was overlooked until it had actually attained 110·5° F. Fortunately for the patient the abnormally high temperature passed away as quickly as it came, without leaving any organic lesion. We have become so accustomed to associate high temperatures with organic changes, to measure the severity of the case by the thermometer, and to base the prognosis on its rise and fall that cases which emphasise the unwisdom of being guided by any one symptom or group of symptoms, to the exclusion of the consideration of all symptoms of the case and the power of endurance of the patient, are likely to convey a much-needed lesson.

Meat Diet in Renal Disease.

It is customary to recommend the consumption of white meat in preference to red in cases of chronic nephritis, on the ground that the ingestion of red meat exerts a prejudicial effect on the albuminuria. Dr. Kaufmann, of Frankfort, has just published a series of observations which he has carried out in order to determine whether or not this rule of practice has any scientific foundation. As a matter of fact, he found that the particular kind of meat ingested had no obvious effect on the nitrogenous excretion or on the urinary albumin. In the same patient the variations in the quantity of albumin in the urine took place quite independently of the nature of the diet, the maximum albuminuria sometimes coinciding with a milk diet, at others with the administration of white or red meat, indeed in some observations the substitution of red for white meat was followed by a reduction in the amount of urinary albumin, so that, on the whole, he is inclined to attribute these oscillations to causes other than dietetic. It follows that if the condition of the patient be such as to allow of his taking meat at all the kind of meat is not a matter of any particular importance.

Solanine in Potato Peel.

Students of materia medica are usually taught that the potato belongs to the same botanical family as belladonna, a fact which naturally excites a feeling of mild surprise. It seems, however, that the potato is not quite as innocuous as is generally believed. At an inquest held last week at Bristol on a child of eight, who had died under somewhat mysterious circumstances, the post-mortem examination revealed the fact that the stomach contained a large and varied assortment of edible articles, among them sundry pieces of potato peel, to the toxic constituents whereof, according to the medical evidence, death was due. A verdict was returned in accordance therewith, but if really death can be caused by eating raw potatoes it is as well that we should be made aware of the fact, although the raw potato is not usually regarded as edible except by the omnivorous child. The evidence contained in the report before us does not enable us to offer an opinion as to the likelihood of this hypothesis being the correct explanation of the fatal result. It is at least plausible that the ingestion of several slices of raw potato *plus* a large quantity of fruit, presumably also raw, may have determined an attack of acute dyspepsia capable of causing death. We are unable to discover any evidence in support of the view that potato peel contains a sufficiency of toxic principles to cause death.

The Work of the Royal Commission on Tuberculosis.

The sensational declaration of Professor Koch at the recent Congress on Tuberculosis led to the appointment of a Royal Commission last September, and this called forth the generous offer of Sir James Blyth to place two of his farms at the disposal of the Commission. Work has quietly but steadily been progressing at Stansted, in Essex. Suitable buildings have been erected, and experts are carrying out an elaborate series of experiments and observations, but it will be some time before any authoritative statement of results can be expected. Our illustrated contemporary, the *Graphic*, in the current number, gives interesting views of the farms at Stansted and Bishop Stortford, lent to the Government by Sir James Blyth. This happy combination of State aid and philanthropic private assistance is in thorough accord with the best British sentiment, and much benefit is likely to accrue not only to the Empire but to the whole world.

Notification of Phthisis.

A certain degree of voluntary notification of phthisis has been carried on in this country in Manchester, Oldham, Brighton, and some few other places. Efforts have been made to secure compulsory notification, but hitherto without success. The authorities of the Local Government Board, with cranial fettering of red tape, effectually bar progress. In this, as in so many other matters of reform, it would seem pressure must come from without, and we must be frightened into action by the progressive movements of foreign countries. The Austrian Home Office has recently issued an ordinance compelling the employment of prophylactic and hygienic measures against tuberculous infection. Every case of tuberculosis is to be notified. Germany will doubtless quickly follow suit, and of course finally the Local Government Board will be compelled to agree to compulsory notification.

Small-pox in Barbados.

A smart outbreak of small-pox has occurred in Barbados, and according to recent reports is rapidly spreading. Great difficulty has been experienced in obtaining medical assistance for the victims, the resident physicians declining to lend their aid, and it has been found necessary to import a young practitioner for the purpose. The supply of vaccine promptly ran out at the first alarm, and supplies have had to be obtained from America and England. Owing doubless to climatic influences much of the lymph has proved unsatisfactory, and public opinion is strongly expressed on the subject.

The Illness of Professor Virchow.

Recent telegrams from Berlin represent the illustrious professor to be in a very critical state of health. He has been staying in the Harz mountains, whither he betook himself on recovering from his accident of a few months since. The shock caused by his injury is no doubt the source of the prostration from which Professor Virchow is now suffering, and in view of his advanced age it cannot be denied that his state is such as to justify anxiety. The latest telegram states that his removal to Berlin on Monday last was fairly well borne.

The Pawn-shop and Disease.

The pawn-shop is an important factor in our social system. The comfort, if not the existence, of a large section of the community may be said to depend upon its presence. Where poverty exists the pawn-shop flourishes. The association is not unnatural. Certain of its most manifest evils have been controlled by legislative enactments. But it is remarkable that the part which the pawn-shop plays in the spread of disease has been to a great extent lost sight of. And yet, as is well known, clothing affords a ready means for the spread of many forms of infectious disease. We venture to think that it would be well for the community if medical officers of health devoted more attention to this matter and were provided with greater powers for securing a nearer approach to hygienic conditions in all pawn-shops.

The Prophylaxis of Hæmophilia.

The precise nature of the curious condition of the blood exemplified in hæmophilia is still a mystery; indeed, we have not heard of any plausible explanation of the non-coagulability of the blood in the subjects of this distressing and often dangerous abnormality. Empirically, however, it is possible to do much to ward off the disastrous consequences of this organic defect. By the administration of chloride of calcium, for instance, the coagulability of the blood can to some extent be restored, and even more satisfactory results are afforded by the administration of gelatine by the mouth. This should be given in daily doses of half an ounce, a quantity which can easily be taken without any change in the ordinary diet. It is worthy of note that the influence on the plasticity of the blood of the ingestion of gelatine is also productive of good effects in albuminuria.

A Record Swim.

The remarkable performance of Montagu Holbein merits the highest praise, and will long rank among the most famous of physical achievements, for it affords a wonderful demonstration of human endurance. To have remained for over twenty-two hours in the sea and travelled something like forty-five miles must be accounted a record which will not readily be beaten. Holbein is forty-one years of age, and has spent many years in contests of physical endurance. His latest feat offered much material for interesting physiological observations, and we hope scientific data may be forthcoming which may at least to some extent extend our knowledge of the problems connected with long-continued exercise, and the near and remote consequences of fatigue.

Tramcar Scrimmages.

The fatal injury recently reported as resulting from the rush to the tramcars at Blackfriars Bridge has drawn attention to the need for reform in our methods of tramcar loading. The violent scrimmages which are everyday occurrences in many of our large centres of industry are not only serious breaches in courtesy, but give rise to physical dangers and mental distress. Difficulties have arisen in securing a procedure which shall be simple and yet effectual. The queue, the number system, and the sheep-pen method all have their drawbacks ; but, if the present unseemly and dangerous proceedings continue, some manner of relief must at all costs be secured in the interest of women and children, and to preserve humanity from some of the worst manifestations of animalism.

The Soldier's Feet.

Feats of military prowess depend in great measure on the feet of the average private. We are glad to see that even the slow-moving War Office is beginning to realise the importance of providing soldiers with a good understanding. We hear that "the War Office authorities are considering the best means of preventing men falling out of the ranks with sore feet." Each battalion, it is said, has been provided with a chiropodist. It seems that the German principle of pedal protection may be enforced. But will the conservative spirit of the British soldier allow him to give up the time-honoured advice, "Just drop some tallow in your socks and that will make 'em well ?"

Proposed Memorial to Capt. E. G. Forrest, R.A.M.C.

It has been proposed by some of the many friends of the late Capt. Forrest, of the Royal Army Medical Corps, whose early death we recorded some short time ago, to erect a memorial to him either at Aden, in which place he died, or at his home in Ireland. Subscriptions are to be limited to ten rupees (13s. 4d.), and should be sent to Capt. A. H. Waring, R.A.M.C., No. 1 Section Hospital, Secunderabad, India. Many of his friends who were connected with him at College or in the Army Medical Service will doubtless be glad to join in this memorial.

The Resuscitation of the Still-born.

Rhythmical traction of the tongue has been highly lauded as a substitute for artificial respiration in attempting the resuscitation of apparently still-born infants, but this procedure, though of unquestionable utility, has the drawback of being somewhat difficult of application in these cases on account of the difficulty of obtaining and retaining a firm grip on the little tongue. As an alternative it is pointed out that rhythmical pressure on the base of the tongue by the finger introduced through the mouth answers the same purpose, and at the same time it has the advantage of freeing the upper air passages from any accidental cause of obstruction.

Whooping-Cough.

Dr. Arnat recommends the inhalation of iodide of ethyl as a means of cutting short paroxysms of whooping-cough. No apparatus is necessary : the stopper is removed from the bottle and the patient merely inhales the vapour. It is claimed to be peculiarly serviceable in the cough of children from two to five years of age, and in those in whom the paroxysm terminates in vomiting, or in suffusion of the subconjunctival vessels.

PERSONAL.

Dr. James Goodhart will take the chair at the Guy's Hospital Old Students' Dinner, on October 1st.

Dr. F. W. Clark, Medical Officer of Health for Hong Kong, has been nominated a member of the Legislative Council of that colo ny.

Mr. Godfrey H. Hamilton, Secretary to the British and Foreign Blind Association, has been appointed Secretary to the National Hospital for the Paralysed and Epileptic.

Surg.-Gen. Sir W. D. Wilson, K.C.M.G., is expected back from South Africa to take up the Principal Medical Officership of the Third Army Corps in this country, in succession to Surg.-Gen. A. F. Preston, retired on the age limit.

Dr. William Palmer Wynne, F.R.S., Assistant Professor of Chemistry in the Royal College of Science, South Kensington, has been appointed to the chair of Chemistry in the School of Pharmacy of the Pharmaceutical Society of Great Britain.

Dr. W. H. Drummond, who is now on a visit to England, practises medicine in Montreal and lectures on Medical Jurisprudence in the University of that city, but it is as a novelist of considerable power and great originality that he is chiefly known. In his works, "The Habitant and other French-Canadian Poems" and "Johnnie Courteau," he has given us remarkable portrayals of early French-Canadian life.

For the time being Sir Frederick Treves cannot be said to have any "private life." Enterprising journalists have been "grubbing" into his history and antecedents, and have made public all that, in their estimation, was not "unfit for publication." We learn, not without surprise, that Sir Frederick, as a schoolboy, though by no means destitute of abilities, was "somewhat sluggish, moody, and silent"—a lad who "cribbed when he could, read Dumas and Mayne Reid by stealth, and manœuvred as many holidays through indisposition as he possibly could." This fragment of history reads like a paraphrase of Mark Twain's famous story about the good Jimmy who was drowned on his way back from Sunday-school, and the bad Jimmy who played truant, and spent an altogether enjoyable afternoon, getting home in good time for tea.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

BELFAST.

[FROM OUR OWN CORRESPONDENT.]

At a meeting held last week the Board of Guardians adopted the report of the Committee appointed to consider Dr. Smyth's (Local Government Board Inspector) report of the inquiry relative to the excessive expenditure on medicines and medical and surgical appliances. They recommended that the minutes of the evidence taken at the inquiry be printed, and that each guardian be furnished with a copy of the same.

The Annual Report of the President of Queen's College, Belfast, has just been published, and, as usual, contains much matter of interest. It records the resignation of Professor W. H. Thompson, who for nine years had held the Chair of Physiology, leaving it to take up the duties of the King's Professorship of the Institutes of Medicine in Trinity College, Dublin. It further records the resignation of Dr. R. O. Cunningham, who held the Chair of Natural History for about thirty-two years. His striking figure will be missed at the Royal University examinations, as well as in Queen's College. Special reference is made by the President to the Royal University examinations for the degrees of M.B., B.Ch., and B.A.O., calling attention to the very satisfactory report upon them of the General Medical Council, from which several quotations are given.

An important section of the report deals with the great advances made of recent years in the facilities offered for post-graduate work, though the fact is not mentioned that the credit for starting this is due to Professors W. H. Thompson (in physiology) and Lorrain Smith (in pathology). Their excellent example has now been followed in various other departments not strictly medical, and a vast amount of useful work is being done. As the President mentions, two new sections have been started under the Professor of Pathology, one dealing with clinical pathology, under the care of Dr. Thos. Houston, who holds a research studentship of the British Medical Association, and one dealing with pathological neurology, under Dr. R. A. L. Graham, a past Henry Hutchinson Stewart scholar in mental diseases.

The two chairs rendered vacant by the resignations of which the President speaks have not yet been filled, but must be so before the winter session opens. Much importance is naturally attached to the Chair of Physiology by medical men here, and the claims of rival candidates have been freely discussed. A point of special interest arises just now—whether or no the Professor of Physiology should necessarily hold a medical degree. It seems to be the fashion among young physiologists at the English Universities not to take medical degrees as they used to do, but the feeling here is that a man who does not hold such a degree ought not to be appointed to teach medical students. The teaching of such a man, however scientific, is apt to lack the practical bearing on clinical work which is so desirable in the physiological class-room.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

MODERN ASPECTS OF DENTAL SCIENCE.

To the Editor of The Medical Press and Circular.

Sir,—The dental profession should be gratified by the appreciative article under the above heading in your issue of to-day, August 27th. It would be easy to magnify unduly the importance of dental disease as a factor in production of general systemic disorders; but there can be no doubt that until late years the significance of this factor has been almost completely ignored. Until within the last twenty-five years a scientifically educated dental profession cannot be said to have existed. The majority of dentists were formerly mere mechanics, with very rudimentary, if any, acquaintance with pathology, even as pertaining to the dental tissues and the immediate connections of the teeth alone. Now in all large towns and many smaller ones there are to be found dental practitioners as highly qualified in their department as any other class of surgical specialists; men fully competent to help in the diagnosis and treatment of cases influenced by or due to dental disease or septic conditions of the mouth. Injuries and diseases of the teeth, besides having frequently a share in causation or aggravation of systemic disease, are as often associated with local surgical affections. Among these may be enumerated empyema of the antrum, ulcerations of the mouth and tongue, and wide-spreading cellular inflammation extending from the dental alveoli. The last-named cases, which are much more common than might be supposed, are often due to fracture of roots of teeth within their alveoli. Two cases ending fatally were recently reported. The dental lesions were not discovered before death by the surgeons in charge; and there seemed little doubt that if a dental surgeon had in each case been called in at first, and a correct diagnosis made, the lives of both patients might have been saved by timely removal of the dental cause of the mischief. A case of this kind was reported at a recent meeting of the Odontological Society. In this instance the case was seen at the outset by a dental surgeon, and the mischief was cut short in its initial stage.

I am, Sir, yours truly,

August 28th, 1902. M.R.C.S., L.D.S.

TURPENTINE AS A DEODORANT.

To the Editor of The Medical Press and Circular.

Sir,—In last issue under above heading, the outward application of turpentine is recommended. Small doses internally would be much more effective, and not only prevent obnoxious odour, but substitute an agreeable one, *i.e.*, the odour of violets.

Boric acid in 10 or 15 grain doses in egg-cup of milk, t. d., would also be found in practice in these distressing cases most valuable.

I am, Sir, yours truly,
Alexander Duke.

London.

CIVILISATION AND THE BIRTH-RATE.

To the Editor of The Medical Press and Circular.

Sir,—It is only in medical journals that the questions broached in your leader of to-day, August 27th, can be freely and fully discussed, and, as I pointed out during the correspondence which went on in The Medical Press and Circular on the same topic a few months ago, it is certain that the great number of scientific, albeit non-medical, readers of your valuable paper will be glad to see space given up to it on occasion. The population question in its aspect at the present day—so very different to what it was in the days of the early political economists—is of enormous interest and importance to the philosopher and the student of sociology, no less than to the statesmen. It is attracting more and more notice from all these classes, as is evidenced by the numerous articles in special and general newspapers, and discussions at scientific societies. A leader on the subject appears in *The Times* of Monday last, August 25th, one of many such articles with much correspondence recently published in your great contemporary. The subject came up, I notice, at the late meeting of the British Medical Association. A paper was there read by Dr. Charles Drysdale advocating the systematic artificial limitation of the family as the best remedy for pauperism. This seems to me most pernicious advice. Pauperism is rather a symptom of deeper-seated social disorders which are not curable save by removal of the root causes. If the practice of limiting the number of children be pushed in this country, as it has been for a generation or two in France, to its logical conclusion from the egotistical point of view, nothing can save the nation and the empire from the decay which has already put an end to the true greatness of France, and will surely terminate in degrading that hitherto splendid nation to the level of its effete neighbours, Spain and Portugal.

I am, Sir, yours truly,
A Student of Sociology.

August 29th, 1902.

Literature.

PRINCIPLES AND PRACTICE OF THERAPEUTICS. (a)

More than a quarter of a century has elapsed since the appearance of the first edition of Wood's well-known treatise on therapeutics. It is said to have been designed and completed in less than a year. It was "entered according to Act of Congress, in 1875, by J. B. Lippincott and Co., in the office of the Librarian of Congress at Washington." It was described as "a work on medical agencies, drugs, and poisons, with especial reference to the relations between physiology and clinical medicine." It has now reached the dignity of an eleventh edition, and the author has associated with himself in its production his son, Dr. Horatio C. Wood, jun., Demonstrator of Pharmaco-dynamics in the University of Pennsylvania. Although described as a treatise on therapeutics, it has always been regarded as the leading work in the English language on pharmacology. From the clinical point of view it is less practical and less suggestive than the works of S. Ringer and C. D. F. Phillips. The present edition has undergone many modifications, and by a judicious arrangement of type an attempt has been made to bring it more in accord with the requirements of students. The plan of giving a summary of the actions of each drug or of each group of drugs is an innovation and is distinctly useful. The references are now arranged at the end of each article instead of being scattered throughout the text or referred to in foot notes, and this, again, is a distinct advantage. The plan, however, has certain disadvantages from the point of view of the authors, for the reader familiar with the subject more easily detects omissions and is in a better position to detect inaccuracies. In a text-book of this description a large amount of boiling down is essential, and in many cases this seems to have been done not too judiciously. It requires a master-hand to determine what to accept and what to reject, and in this respect judgment is sometimes lacking. Articles of little moment are quoted at length, whilst others of primary importance are but briefly mentioned, or are passed over in silence. We must admit that we do not place the same implicit trust in much of the work contained in this volume as was freely accorded to, say, the seventh edition. What may be the explanation of this we do not know. The authors are sufficiently outspoken, and for this they deserve much credit. For example, in dealing with disinfectants they point out that there are not many affairs in life in which the public have been so superabundantly fleeced as in this particular matter. "A most extraordinary part of this swindling is the ease with which distinguished members of the medical profession have given certificates of efficiency to comparatively inert and extraordinarily expensive proprietary compounds." A list is given representing from the pecuniary side of the question the comparative germicidal power of various drugs. Corrosive sublimate is the cheapest, whilst carbolic acid comes a long way down. This table is worth studying by those who are in the habit of ordering disinfectants in large quantities.

In dealing with pharmacological actions the authors are at their best, but they seem to be wanting in the tact and experience of the old therapeutic hand. They have done well to ignore the preparations of the Pharmacopœia, which are entirely out of place in a work of this description. The average prescriber has a deep-rooted belief that if he knows his pharmacopœia he is a pharmacologist. This idea is fostered by the fact that students in England (this does not apply to the Scotch universities) are not examined in pharmacology, and that they are not required to display anything more than the most elementary knowledge of the action of drugs either in health or disease. Pharmacology, which is the basis of all rational treatment, is a lost art in this country. Pathology and bacteriology are for the moment in the ascendant, and it may be some years before the school of English pharmacology is revived. Fraser and Stockman continue to do good work in Scotland, but more investigators of this stamp are sadly needed. Wood's Therapeutics is a great work, and is of inestimable value to those whose business in life it is to deal with the actions of drugs.

CLINICAL HÆMATOLOGY. (a)

Enormous advances have been made of late in the study of diseases of the blood, and in this category we include not only the various forms of anæmia such as secondary anæmia, chlorosis, pernicious anæmia and splenic anæmia, but lukæmia, both of the lymphatic and spleno-myelogenous varieties, lymphadenoma, purpura, scorbutus—land, sea, and infantile—and hæmophilia. So much depends for their differential diagnosis on a study of blood counts that some knowledge of the subject is required not only from the hospital physician but from the general practitioner. Post-graduate classes have been established in connection with many of our general and special hospitals both in London and in the provinces, and there is an increasing disposition on the part of those engaged in active practice to avail themselves of the opportunities so afforded. But there must always be a certain percentage of men who, from their distance from medical centres, cannot afford the time to take out courses of practical instruction. For them the only substitute, if they wish to prevent themselves from falling hopelessly behind in the struggle for existence, is a careful study of well-arranged text-books. Of these there are many dealing with various branches of medicine, surgery, and therapeutics, but a good work on clinical hæmatology has long been a desideratum. The apparatus required for these investigations is very inexpensive—a moderately good microscope, a few slides and cover-glasses, and half a dozen bottles of reagents and staining-fluids. With this simple outfit and a good text-book the novice may fairly hope in the course of a few months to obtain a knowledge of the subject which will place him in a position to deal with a common and very important group of diseases. The anæmias alone are worth consideration for the practitioner who mistakes a case of Banti's disease for one of chlorosis, and gives his prognosis accordingly, must of necessity sustain professional damage.

Many excellent works on the clinical examination of the blood have been published during the last four or five years, and among them may be mentioned the elaborate treatise of Cabot, of Boston, a book of some 500 pages. Dr. Da Costa's work contains about the same number of pages with eight full-page coloured plates, three charts, and forty-eight illustrations, all of which are excellent. The author has arranged his facts in a form which cannot fail to enlist the sympathies of his readers. He is thoroughly practical, and displays an exceptional knowledge of all branches of this somewhat difficult subject. The book deals not only with diseases of the blood, but includes general hæmatology. Information of a practical and useful character is given respecting bronchitis, influenza, diphtheria, diabetes mellitus, enteric fever, gastric ulcer, gout, and other common complaints. The differential tables are excellent, and from a clinical point of view are of the greatest value in diagnosis. We cannot find fault with a work which possesses so many good qualities, but we may point out that under the head of splenic anæmia the author has done scant justice to the classical researches of Guido Banti, of Florence. In speaking of spleno-medullary lukæmia he seems to be unacquainted with the occasional complication of the disease with tuberculosis. This condition, we admit, is extremely rare, but the few cases which have been recorded have been by American authors. Taking it on the whole, we have no hesitation in saying that it is the best work on clinical hæmatology in the English language.

(a) "Therapeutics: Its Principles and Practice." By Horatio C. Wood, M.D., LL.D. Eleventh Edition. Remodelled in great part and rewritten by Horatio C. Wood and Horatio C. Wood, jun., M.D. London: Smith, Elder and Co. 1902.

(a) "Clinical Hæmatology. A Practical Guide to the Examination of the Blood, with Reference to Diagnosis." By John C. Da Costa, jr., M.D., Jefferson Medical College. London: Rebman, Limited. 1902.

SANITARY ENGINEERING. (a)

The author has approached his subject from the standpoint of practical experience, and, although the book contains some statements which will evoke considerable criticism, and with which we do not ourselves agree, may be said to have accomplished his task with reasonable success.

The opening chapters, dealing mainly with hydraulics and mathematical formulæ, an accurate grasp of which is essential to a thorough knowledge of the subject, contain much valuable information of a practical nature. Drainage and sewerage are dealt with in the succeeding eight chapters in a manner which is on the whole admirable, though we cannot say we find ourselves altogether in accord with some of the author's recommendations. For instance, on page 57, it is laid down that "drains from water and other closets should be at least 6 ins. in diameter." This, we think, is not the size usually adopted for, at all events, small and medium-sized houses, nor is such a large bore necessary. Neither can we agree with the author's contention that, because a smaller drain may become choked through improper usage a larger one should be substituted. Again, while the danger of laying gas and water mains inside a sewage culvert is very properly pointed out in Section 150, nevertheless in a later chapter (Section 359) we find the placing of sewers, gas, water, and electric mains in a common culvert under a river actually recommended. Apart from any possible danger consequent on the close proximity of gas and electric mains, the inadvisability of water mains being laid in any way near sewers cannot we think, considering the rapidity with which water absorbs gases, be too strongly insisted on. Probably the best part of the book is Chapters 15 and 16, dealing with sewage disposal, the latter especially, which treats of bacteriological purification, being most interesting, and brought thoroughly up to date.

We do not find, either under the heading of sewer construction or elsewhere, any reference to the Durham system of using iron pipes, which has found much favour among some sanitary engineers, both in America and in this country. This omission is the more regretable, as the other systems are dealt with in detail. The sections on drain testing might be, we think with advantage, elaborated in a future edition. We are not inclined to place too much reliance on the smoke and pungent chemical tests which seem to find most favour with the author, to the exclusion of the water test only mentioned incidentally, and the compressed air test, as suggested by Gilbert Thomson, all reference to which is omitted.

The writer is at fault in his knowledge of sanitary law when he states (page 250) that "the Public Health Act, 1875, provides that every Local Authority *shall* undertake the removal of house refuse from premises." The section is permissive, but may be made compulsory by Local Government Board order. Further, Section 44 (P. H. Act) empowers the Local Authority to impose under bye-law such duty on the occupier of the premises.

Apart from these and a few minor faults the book is well written, and should prove of much value to all engaged in public health work. The illustrations are numerous and clearly drawn, while the general production of the work leaves nothing to be desired. We can commend it to all desirous of obtaining an insight into the principles of sanitary engineering.

DISEASES OF CHILDREN. (a)

When a book, no matter on what theme, reaches the seventh edition, it proves beyond all doubt that the subject of which it treats is important, that the demand for it is great, and that the matter therein contained has been duly appreciated.

Diseases of children are a part of the student's training which we think as a rule is very often very much overlooked or very superficially studied. We consider this a great pity, as children's ailments comprise a very large portion of the practitioner's work when engaged in the general practice of his profession. In the work before us the student has a manual which will give him a very extensive, useful, and practical guide to the diseases peculiar to infantile life. This edition, the author states, has been subject to considerable revision and rearrangement. The chapter on the feeding of infants is dealt with in a very comprehensive manner, and brought quite up to date. The various diseases are grouped in separate chapters, of which there are over fifty. The book comprises over 800 pages, is printed on good paper, and reflects credit on the author and publishers alike. After a careful perusal we strongly recommend this work as a safe and voluminous epitome of infantile diseases.

Laboratory Notes.

ANTIPHLOGISTINE.

(London Office: 18, Jeffrys Road, Clapham Road.)

This preparation appears to be admirably suited for the purposes for which it is intended, namely, as a soothing antiseptic poultice or dressing applicable to a great variety of cases.

It consists of a smooth homogeneous mixture of several chemical substances, the base being the silicates of alumina and magnesia in intimate alliance with pure glycerine, while the antiseptic property is conveyed by the presence of boric and salicylic acids. There are, in addition, other ingredients which in our opinion combine to make this preparation highly fitted for the purposes for which it is designed.

This preparation has met with success in America as a local application of great value in a large number of different classes of cases, and we would urge our medical friends to give it a careful trial, as we have satisfied ourselves by analysis that its composition corresponds with the ingredients stated in the excellent pamphlet that is issued by those who are responsible for its production.

SOME IMPROVED TOOTH POWDERS AND MOUTH WASHES.

The first essential quality without which it is out of the question to hope for the habitual use of a dentifrice by the average patient is, that it be agreeable to use and leave a pleasant after-flavour and feeling of cleanliness in the mouth. Messrs. Rouse & Co., chemists, of Wigmore Street, W., have sent us some improved tooth powders and mouth washes, and have communicated to us the full formulæ of these preparations, and inform us that they are based upon the principles laid down in Messrs. Sewill and England's work on "Dental Pathology and Surgery" (fourth edition recently issued). Seeing that caries cannot go on without occurrence of fermentation and putrefaction in the *débris* lodging upon the teeth, it is evident that much can be done to prevent dental decay by antiseptic treatment. Then again, when vitiation of the secretions of the mouth exists, it is of importance that this should be corrected to prevent injurious effects on the health. Messrs. Rouse's tooth powders and mouth washes, some of which are for ordinary use, some for cases where the secretions are foul, seem to be admirably adapted for their purposes, and should command the confidence of the medical profession, who rightly look with suspicion on secret cosmetic preparations, being well aware that these when not harmful are mostly useless for their purpose. A largely puffed tooth powder, recently analysed by us, proved to be made up mostly of common chalk and levigated pumice. Such a mixture would have the effect, no doubt, of whitening the teeth, but would do this by slowly grinding away their enamel and gradually destroying them.

(a) "Sanitary Engineering." By Francis Wood, A.M. Inst. C.E., F.G.S., &c. Pages xi. and 304. London: Charles Griffin and Co. Limited. 1902.

(a) "The Diseases of Children." By James Frederic Goodhart, M.D., LL.D.Aberd., F.R.C.P. Seventh Edition, with the assistance of George Frederic Still, M.A., M.D., F.R.C.P. London: J. and A. Churchill. Price 12s. 6d. net. 1902.

A Religious Mania in Canada.

It is a remarkable fact that in all ages and in all countries morbid psychological displays have assumed epidemic characters. Even in these matter-of-fact days of the twentieth century outbreaks of so-called "religious mania" occur even as in mediæval times. A remarkable example is reported from Winnipeg. The large colony of Doukhobors, recently planted in Manitoba, is the seat of affection. The entire colony, it appears, has been seized with religious mania. Its members have abandoned the use of horses, cows, and all domestic animals. The poor creatures have been turned adrift. Moreover, these infatuated people refuse to wear wool or leather because these are animal products. At all events, it would seem that the Doukhobors are more logical than some of our English anti-vivisectors.

The Polyclinic.

The Polyclinic and Post-Graduate College in Chenies Street reopens on September 8th.

Dublin Death-rate.

The deaths registered in the Dublin registration area for the week ending Saturday, August 23rd, 1902, represent an annual rate of mortality of 20·1 in every 1,000 of the population. During the week there were nineteen deaths from diseases of the nervous system, seventeen from diseases of the circulatory system, and eighteen from diseases of the respiratory system. In thirteen cases the deaths were uncertified, there having been no medical attendant during the last illness. Fifty-two infants died during the week, of whom twenty-nine were under twelve months old. Within the city the death-rates in the districts named were as follows:—Clarence Street North, 29·4 per 1,000; Blackhall Place, 28·0 per 1,000; Castle Street, 27·4 per 1,000; and Peter Street, 25·7 per 1,000.

The Weaning of Puppies.

Lemaistre has noticed that mother dogs feed their puppies with matter which they vomit for the purpose when lactation ceases. The substances vomited must be predigested and form a natural transition diet between milk and solid food. He therefore suggests that it might be possible to utilise peptones derived from herbivora or even carnivora in some such way, when an extremely nourishing predigested food is needed in the clinic. Gasterin, which is much used in therapeutics abroad, is merely gastric juice derived from living dogs.

St. Thomas's Hospital.—House Appointments.

The following gentlemen have been selected as house officers from yesterday, September 2nd:—

House Physicians.—A. D. Hamilton, M.B.Lond., L.R.C.P., M.R.C.S.; C. H. Sedgwick, M.A., M.B., B.C.Cantab.; H. W. Sinclair, M.B.Lond., L.R.C.P., M.R.C.S. (extension); K. E. Crompton, B.A., M.B. B.C.Cantab. (extension).

Assistant House Physicians.—W. H. Harwood Yarred, B.Sc.Lond., L.R.C.P., M.R.C.S.; A. Mavrogordato, L.R.C.P., M.R.C.S.

House Surgeons.—W. Hill, B.A.Cantab., L.R.C.P., M.R.C.S.; J. Coates, L.R.C.P., M.R.C.S.; A. C. Hudson, M.A., M.B., B.C.Cantab.; H. Spurrier, B.A.Cantab., L.R.C.P., M.R.C.S.

Assistant House Surgeons.—J. W. Rob, B.A., M.B., B.C.Cantab.; T. B. Henderson, M.A., M.B., B.Ch.Oxon.; J. P. Hedley, M.A., B.C.Cantab.; A. B. Bradford, L.R.C.P., M.R.C.S.

Obstetric House Physicians.—Senior: R. E. Roberts, M.B., B.Sc. Lond.; Junior: F. J. Child, M.A., M.B., B.C. Cantab., L.R.C.P., M.R.C.S.

Ophthalmic House Surgeons.—Senior: F. Clarkson, M.B., B.S.Durh.; Junior: A. E. A. Loosely, B.A.Oxon., L.R.C.P., M.R.C.S.

Clinical Assistants in the Special Department for Diseases of the Throat.—J. E. Adams, L.R.C.P., M.R.C.S.; S. G. Scott, M.A., M.B., B.Ch.Oxon. Skin: A. T. Waterhouse, M.A., M.B., B.Ch.Oxon., L.R.C.P., M.R.C.S.; C. Wheen, B.A., Oxon, L.R.C.P., M.R.C.S. Ear: F. H. Pearce, B.A., L.R.C.P., M.R.C.S.

Clinical Assistants in the Electrical Department.—O. Hildesheim, B.A., M.B., B.Ch.Oxon.

The Purity of Bottled Table Waters.

An American Board of Health has adopted an amendment to the sanitary code, looking to a standard of purity for artificial and bottled waters. Every manufacturer and importer or other persons who manufacture or import mineral spring or other drinking water will be required to file under oath with the Health Department the name of such water, the exact location from which the water is obtained, together with a chemical and bacteriological analysis thereof, also stating when the water was manufactured, the exact formula used in its production, giving qualitatively and quantitatively each and every item entering into its composition. Anyone failing to comply with these requirements will be refused a permit.

Cholera in Egypt.

The epidemic of cholera in Egypt has attained formidable dimensions. The fresh cases last week numbered 3,086, with 2,294 deaths, bringing the total up to 7,374 cases, with 5,540 deaths. Alexandria has remained practically free from the disease, and the ports on the Canal are not, so far, infected. The outlook is gloomy, the daily number of new cases averaging over 700, and no improvement is anticipated for some weeks to come. Active measures of isolation of infected districts and disinfection are being enforced.

Death of a Football Player from Tetanus.

The death of Mr. David Jones, the well-known football player, from tetanus following a wound received during a game, elicited from the coroner's jury sundry expressions of dissatisfaction concerning the way in which the wound was dressed on the field, their criticism being based on the fact that some "grit" and bits of grass came away from the wound after the removal of the deceased to the Royal Infirmary. Doubtless every effort should be made to cleanse such wounds of all foreign bodies, but it may comfort the relatives to know that the most thorough scrubbing and mauling of the wounded surface, even under an anæsthetic, have often failed to avert a subsequent attack of tetanus. A verdict of accidental death was returned.

A Roumanian Doctor at Nottingham.

An inquest was held by the Nottingham City Coroner on a child who had been attended by a Mr. Morris Martin, who claimed to be M.D. of Roumania, his diploma having been seized by the Boers, who had commandeered his services in South Africa. He gave the child medicine for diarrhœa, in contravention of the Apothecaries Act, but at the autopsy death proved to have been due to intussusception. Dr. Cran testified that the treatment was appropriate, and a verdict of "Death from natural causes" was returned.

Indian Medical Service.

The following is a list of the candidates for His Majesty's Indian Medical Service who were successful at the recent competitive examination held in London:—

	Marks.		Marks.
A. T. Pridham	3,162	P. G. Easton	2,542
F. P. Mackie	3,097	J. L. Lunham	2,522
F. P. Connor	3,032	W. J. Collinson	2,502
J. O'Leary	2,995	T. C. M. Young	2,500
S. R. Christophers	2,913	H. M. H. Melhuish	2,463
H. R. Dutton	2,873	G. A. Jolly	2,449
W. W. Jendwine	2,820	H. H. Kiddle	2,442
H. M. Brown	2,817	R. F. C. Talbot	2,383
V. B. Nesfield	2,774	F. C. Rogers	2,377
H. Emslie-Smith	2.738	R. D. Saigal	2,366
A. F. Pilkington	2,738	G. F. Humphreys	2,356
H. C. Brown	2,645	M. Ba-Ket	2,332
C. E. Bulteel	2,611	C. A. F. Hingston	2,289
G. H. L. Whale	2,584	C. L. Dunn	2,251
F. P. Vieyra	2,542	A. K. Lauddie	2,228

Notices to Correspondents, Short Letters, &c.

☞ **Correspondents** requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

REFRACTORY SCIATICA.

X.Z.—Sciatica is known to be extremely refractory to treatment. Among the methods which appear to have been successful in affording more or less durable relief are: - Stypage, *e g.*, the application of extreme cold by means of a jet of ethyl chloride along the course of the nerve, and the subcutaneous injection of atropine. Dissolve 1.50 gr. of the alkaloidal salt in 100 minims of water; three minims of this solution is injected into the affected limb. If the toxic symptoms, &c., subside in less than twelve hours the dose has been insufficient, it being desirable that the stupor, &c., should last twenty-four hours. Dr. Felt, of Boston, claims to have obtained permanent relief in twenty-two out of twenty-eight cases of severe sciatica.

DENTAL PROVERBS.

"A twist in time saves nine." "Abscess makes the gum grow tender." "A tooth in the head is worth two on a plate."—*Judy.*

Dr. Chevers.—Acoin is one of the many substitutes for cocaine, and is especially recommended for use in dental practice on the ground that it is also a strong antiseptic. It is employed in a solution containing 1.10 grain per cent. with 1 per cent. of sodium chloride.

SENATOR HOAR'S JEST.

Senator Hoar received word the other day that a friend who had been supposed to have appendicitis was suffering not from the ailment, but from acute indigestion. "That is good news," said the Senator, "I rejoice that the trouble lies in the table of contents rather than in the appendix."—*Chicago Journal.*

M. R. F.—The common house fly (*musca domestica*) does not bite or sting. When rain is imminent other species enter houses, the stable fly (*stomoxys calcitrans*), for instance, and attack the inmates. Hence the saying that "flies bite before a rain."

OINTMENT IN BLEPHARITIS.

Dr. Raimondo Ferro recommends the following ointment, which has been of great service to him in the treatment of blepharitis:

Take Cupri sulphatis |
Ichthyol. āā .... gr. viij. | 50 ;
Vaselini albi .... oz. j 30 |

M. Sig.: Cleanse the parts and apply locally.

Its use, according to the author, does not affect the cornea or conjunctiva, and so uniform are the results that he considers the ointment a specific in blepharitis. The ichthyol acts as an antiseptic and a stimulant while the copper sulphate exerts astringent properties, reducing the congested sebaceous glands of the eyelids.

Appointments.

Collie, R. J., M.D. (1) Medical Examiner to the London County Council; (2) Assistant Medical Officer to the London School Board.

D'Ewart, John, M.R.C.S., L.R.C.P., House Physician to the Manchester Royal Infirmary.

Ewart, David, M.B., Ch.B.Edin., F.R.C.S.E., Honorary Surgeon to West Sussex, East Hampshire, and Chichester General Infirmary.

French, G. W. H., F.R.C.S., Assistant Surgeon to St. Paul's Hospital for Skin and Genito-Urinary Diseases, Red Lion Square, W.C.

McGachen, F. W. D., M.D., D.Ph.Lond., Medical Officer to the Weymouth and Westham District and Public Vaccinator for Weymouth and Melcombe Regis, *vice* E. N. Pridmore, M.B., Lond., resigned.

Rawdon, F. R., M.B., Ch.B., House Surgeon to the Rotherham Hospital and Dispensary.

Smith, Ward, M.B., Ch.B.Edin., F.R.C.S.E., Surgeon to Sir Titus Salt's Hospital, Shipley.

Valentine, W. A., M.D., B.Ch.Dub., Honorary Surgeon to the Bideford and District Dispensary and Infirmary.

Walker, J. W. Thomson, M.B., C.M.Edin., F.R.C.S.E., Assistant Surgeon to the North-West London Hospital.

Walker, T., M.R.C.S., L.R.C.P., House Surgeon to the Manchester Royal Infirmary.

Wharton, John, B.A., B.C.Camb., House Surgeon to the Manchester Royal Eye Hospital.

Vacancies.

Burton-on-Trent Infirmary.—House Surgeon. Salary £120, together with furnished rooms in the Infirmary, board, coal, and light free. Applications to the Honorary Secretary, Mr. Thomas B. Lowe, J.P., the Infirmary, Burton-on-Trent.

Cancer Hospital, London.—Pathologist. Salary £250 per annum. Applications to the Secretary at the Hospital, Fulham Road, S.W.

Cardiff Infirmary.—Resident Medical Officer. Salary £100 per annum, with board, washing, and furnished apartments. Applications to Leonard D. Rea, Secretary and General Superintendent.

Cheltenham General Hospital.—Assistant House Surgeon. Salary £112 per annum, with board, lodging, and washing. Applications to the Honorary Secretary and Treasurer, General Hospital, Cheltenham.

City of London Epileptic Colony, Horton, Epsom, Surrey.—Medical Superintendent. Salary £600 per annum, with unfurnished house (rates, taxes, and water supply free). Applications to R. W. Partridge, London Asylums Committee Office, 6, Waterloo Place, S.W. (See advt.)

County Mayo Infirmary.—House Surgeon and Compounder. Salary £109 per annum, with apartments, &c. Applications to Dr. O'Malley Knott, Mayo Infirmary, Castlebar. (See advt.)

Denbighshire Infirmary, Denbigh.—House Surgeon. Salary £100, with board, residence, and washing. Applications to W. Vaughan Jones, Secretary.

Kinsale Union. - Trained Nurse. Salary £60 per annum, with furnished apartments, &c. Applications to John Murphy, Clerk of Union. (See advt.)

London County Asylum, Horton, near Epsom, Surrey.—Junior Assistant Medical Officer. Salary £150 per annum, with board, furnished apartments, and washing. Applications to R. W. Partridge, Asylums Committee Office, 6, Waterloo Place, S.W. (See advt.)

Middlesex Hospital, W.—Medical Officer. Salary £150 per annum. Applications to F. Clare Melhado, Secretary-Superintendent.

Roxburgh District Asylum, Melrose, N.B.—Assistant Medical Officer. Salary £120 per annum, with board, rooms, and washing. Applications to the Medical Superintendent.

Wonford House Hospital for the Insane, Exeter.—Assistant Medical Officer. Salary £150 per annum, with full board, &c. Applications to the Medical Superintendent.

Births.

Knaggs.—On Aug. 29th, at 189, Camden Road, N.W., the wife of Dr. H. V. Knaggs, of a daughter.

Lodge.—On Aug. 27th, the wife of Percy Lodge, F.R.C.S., Lee House, Bradford, of a daughter.

Marriage.

Elliston—Warner.—On Aug. 30th, at St. Mary's Parish Church, Wanstead, Essex, Guy, third son of William Alfred Elliston, M.D., J.P., Stoke Hall, Ipswich, to Clara Jane, younger daughter of Benjamin Warner, St. Heliers, Snaresbrook, Essex.

Deaths.

Adcock.—On Aug. 24th, Catherine Elizabeth, widow of Christopher Adcock, M.R.C.S., late of Hunstanton.

Chesman.—On Aug. 28th, at 35, St. Mary's, York, in her 86th year, Sarah, widow of Thomas Cheesman, F.R.C.S.E., late of Sheffield.

Grimsdale.—On Aug. 29th, at his residence, Sandycroft, Hoylake, in his 80th year, Thomas Frederic Grimsdale, L.R.C.P., M.R.C.S.

Willmore.—On Aug. 25th, at Colwyn Bay, Frederic William Willmore, M.R.C.S., of Fairholm, Walsall.

Wright.—On Aug. 27th, at Bedford, Lieut.-Colonel Robert Temple Wright, M.D., I.M.S. (retired), aged 59. No flowers, by request.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—St. George's, 2 p.m.—St. Mary's, 2.30 p.m.—Middlesex, 1.30 p.m.—Westminster, 2 p.m.—Chelsea, 2 p.m.—Samaritan (Gynæcological, by Physicians), 2 p.m.—Soho Square, 2 p.m.—Royal Orthopædic, 2 p.m.—City Orthopædic, 4 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a.m.—Royal Free, 2 p.m

TUESDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex, 1.30 p.m.—Westminster, 2 p.m.—West London, 2.30 p.m.—University College, 2 p.m.—St. George's, 1 p.m.—St. Mary's, 1 p.m.—St. Mark's, 2.30 p.m.—Cancer, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Royal Ear, 3 p.m.—Samaritan 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—Soho Square, 2 p.m.

WEDNESDAYS.—St. Bartholomew's, 1.30 p.m.—University College, 2 p.m.—Royal Free, 2 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. Thomas's, 2 p.m.—London, 2 p.m.—King's College, 2 p.m.—St. George's, (Ophthalmic) 1 p.m.—St. Mary's, 2 p.m.—National Orthopædic, 10 a.m.—St. Peter's, 2 p.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Gt. Ormond St., 9.30 a.m.—Gt. Northern Central, 2.30 p.m.—Westminster, 2 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—Cancer, 2 p.m.—Throat (Golden Square) 9.30 p.m.

THURSDAYS.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—University College, 2 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—London, 2 p.m.—King's College, 2 p.m.—Middlesex, 1.30 p.m.—St. Mary's, 2.30 p.m.—Soho Square, 2 p.m.—North-West London, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central (Gynæcological), 2.30 p.m.—Metropolitan, 2.30 p.m.—London Throat, 9.30 a.m.—St. Mark's, 2 p.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square) 9.30 a.m.

FRIDAYS.—London, 2 p.m.—St. Bartholomew's, 1.30 p.m.—St. Thomas's, 3.30 p.m.—Guy's, 1.30 p.m.—Middlesex, 1.30 p.m.—Charing Cross, 3 p.m.—St. George's, 1 p.m.—King's College, 2 p.m.—St. Mary's, 2 p.m.—Ophthalmic, 10 a.m.—Cancer, 2 p.m.—Chelsea, 2 p.m.—Gt. Northern Central, 2.30 p.m.—West London, 2.30 p.m.—London Throat, 9.30 a.m.—Samaritan, 9.30 a.m. and 2.30 p.m.—Throat (Golden Square), 9.30 a.m.—City Orthopædic, 2.30 p.m.—Soho Square, 2 p.m.

SATURDAYS.—Royal Free, 9 a.m.—London, 2 p.m.—Middlesex, 1.30 p.m.—St. Thomas's, 2 p.m.—University College, 9.15 a.m.—Charing Cross, 2 p.m.—St. George's, 1 p.m.—St. Mary's 10 p.m—Throat (Golden Square), 9.30 a.m.

At the Royal Eye Hospital (2 p.m.), the Royal London Ophthalmic (10 a.m.), the Royal Westminster Ophthalmic (1.30 pm.), and the Central London Ophthalmic Hospitals operations are performed daily.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

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Original Communications.

PUERPERAL ECLAMPSIA
IN THE
LIGHT OF THYROID INADEQUACY
AND ITS
TREATMENT BY THYROID EXTRACT. (a)

By H. OLIPHANT NICHOLSON, M.D.,
M.R.C.P.ED.,
Obstetric Physician to the New Town Dispensary, Edinburgh.

IN the whole range of obstetrics the subject of puerperal eclampsia is the most important problem yet awaiting solution. It is now generally believed that the convulsions are due to an acute toxic poisoning, but how the toxins arise and the precise manner in which they produce their effects, are questions at present unanswered.

In observing pregnant women during the later months of pregnancy are there sufficiently definite clinical signs which will enable us to pick out those who are likely to become eclamptic? I believe trustworthy information on this point is afforded by a study of the circulatory phenomena during pregnancy, and, if the state of the urinary secretion be also considered, it is always possible to separate the abnormal cases from the normal. When a pregnant woman threatens to become eclamptic there are some significant features to be noted.

(1) The characters of the pulse become strikingly altered from those of normal pregnancy—the sphygmographic features are those invariably associated with increased peripheral resistance (vaso-constriction). (2) The walls of the radial arteries become contracted (diminished radial calibre). (3) There is a pronounced and permanent rise in the arterial blood pressure, which increases still more as convulsions become imminent. (4) There is a marked diminution in the quantity of urine secreted in the twenty-four hours. (5) The quantity of urea excreted in the urine is much diminished.

The diminished urea excretion is, perhaps, the most striking and important matter for consideration, for it points to some disturbance in the process of nitrogenous metabolism. It is a well-established fact that the active thyroid supplies a secretion which is essential to the maintenance of the normal metabolic cycle, and with the occurrence of pregnancy the gland undergoes constant enlargement to meet the needs of the increased metabolism at this time. A larger supply of iodothyrin is needed in the pregnant than in the non-pregnant state. In all conditions of hypothyroidism—myxœdema, cretinism, &c.—the urea excretion is diminished, and the quantity of urine secreted is also lessened. The circulatory features in advanced myxœdema are the same as those of the pre-eclamptic state, and the peculiar solid œdema and albuminuria may be common to both conditions.

With such a train of symptoms—whether they occur in a myxœdemic or in an eclamptic patient—the action of thyroid extract is a very precise one. Under its action the metabolic processes of the body are greatly stimulated, and there is a striking increase in the excretion of urea. This at once brings the urine of the eclamptic nearer to the normal again, and coincidently the abnormal conditions of the circulation are altered; the arterial calibre becomes uniformly enlarged, and the secretion of urine is very greatly increased. The diuresis is accompanied by a disappearance of the œdema and albuminuria.

In a general way my conception of the nature of puerperal eclampsia is this: In some pregnant women—for reasons which are at present obscure—the supply of iodothyrin in the tissues becomes, gradually or suddenly, insufficient for the needs of normal metabolism. Then certain toxic substances, which may be intermediate or imperfectly converted products of nitrogenous metabolism, enter the blood. These toxic substances cause contraction of the arteries, not only of the body generally, but of the kidneys in particular, and ultimately, the flow of blood through the kidney being prevented, suppression of urine occurs. Then, as in ordinary uræmia, convulsions are produced. The toxins of eclampsia act like toxic doses of digitalis, and eventually stop their own excretion by producing intense contraction of the renal vessels.

On this view of eclampsia two main principles of treatment are clearly indicated. (1) Re-adjustment of the processes of metabolism, so as to favour the complete metabolism of nitrogenous substances. (2) Re-establishment of the secretion of urine.

Thyroid extract, by its well-known influence on proteid metabolism, fulfils the first indication admirably. The second indication is equally well fulfilled by this remedy, because in order to make the kidney secrete again, the all-important thing is to relax the spasm of the renal arteries. Nothing else will lead to a re-establishment of diuresis, and all the successful remedies used in the treatment of eclampsia—*large* doses of morphia, saline infusions, &c.—really act in this manner. Oliver has shown that thyroid extract possesses a specific action in enlarging the calibre of the arteries, and no remedy acts so profoundly or permanently as a vaso-dilator. I have already shown that when this drug is administered to eclamptic patients in sufficient doses to produce symptoms of "thyroidism," the re-establishment of the secretion of urine is secured, and the other untoward symptoms disappear.

In support of my view that the toxins of eclampsia act as powerful vaso-constrictors, and more especially on the renal vessels, thus leading to suppression of urine, I may mention the following facts :—1. In eclamptic pregnant women the radial arteries become contracted, and the peripheral resistance steadily increases as convulsions become imminent. 2. The blood pressure becomes permanently raised in the pre-eclamptic state. 3. When the blood pressure is at its highest and the radial arteries are most contracted, the secretion of urine is at its lowest point. 4. On the re-establishment of diuresis there is an enlargement of the radial calibre, and a more or less marked fall in the blood pressure.

(a) Abstract of paper read in the Section of Obstetrics, British Medical Association Meeting, Manchester, August, 1902.

As regards treatment, thyroid extract may be used in all cases of eclampsia; but when convulsions are frequent and severe, at least one *large* dose of morphia should be given. Thyroid extract is of great value as a prophylactic remedy, to readjust the process of metabolism when the first indications of breakdown appear. One does not wait for albuminuria; if there is marked *diminution in the quantity of urine*, œdema, headache, and *vomiting*, we should immediately put the patient on five grains of the extract twice a day. Rest and non-nitrogenous diet may also be ordered for a few days until the ominous symptoms subside. In a day or two the secretion of urine becomes greatly increased, and the metabolic processes are again going on efficiently.

Should the symptoms have developed up to the stage of suppression of urine, and if convulsions have occurred, the main object of the remedy is to re-establish renal activity. It must then be sufficiently pushed to produce its full effects upon the circulation. It is necessary to produce symptoms of "thyroidism" as rapidly as possible, for then we know that the arterioles are fully relaxed. Ten or fifteen grains of the dry extract may be given by the mouth and repeated every hour if necessary; or, if the patient cannot swallow, similar doses of the liquor thyroidei must be injected hypodermically. In eclamptic patients, as in cretins, symptoms of "thyroidism" are sometimes very readily induced.

In conclusion, I would like to direct attention to the possible value of thyroid extract in some of those rare cases of suppression of urine occurring after labour or miscarriage.

THE TREATMENT OF ABDOMINAL WOUNDS IN WAR. (*a*)

By CHARLES ROBERTS, M.B., B.S., F.R.C.S.,

Resident Surgical Officer, Manchester Royal Infirmary; late Civil Surgeon, South African Field Force.

In discussing the treatment of abdominal wounds we have to consider (1) the nature of the injury; (2) the cases in which operative interference is indicated; and (3) to what extent the prospect of success of abdominal operations is diminished by the difficulties inseparable from campaigning. When the wound is caused by a high velocity and mantled bullet of small calibre, as the Mauser and Lee-Metford, the extent of the visceral injury depends little, if at all, upon the range at which the bullet is fired, except in some instances in which the wound is complicated by injury to bone.

At very long ranges when the force is spent and in ricochet wounds the bullet may be retained. The course it takes within the abdomen is then lost and the internal injuries may be widespread and with difficulty made out. When both wounds of entry and exit are present the track is always that of a straight line between these two points, and from anatomical knowledge we are able to say what viscera may have been injured. Transverse wounds are more fatal than those passing in an antero-posterior direction. Wounds above the umbilicus are more favourable than those below. Direct antero-posterior wounds in the small intestine area are very unfavourable. Complete transverse wounds above the umbilicus are very unfavourable. That the small intestine area may be crossed without perforation occurring has been demonstrated:—

1. By examination after death. In the published record of the work of the Portland Hospital in South Africa, written by the professional staff, a case is described the details of which were supplied by Mr. Cheatle.

Two perforations were found in the cæcum and sigmoid flexure of the colon, and, though the bullet had undoubtedly crossed the area occupied by the small intestine, no wound of the bowel had occurred.

2. By examination during laparotomy. Mr. Makins, in his work on his surgical experiences in South Africa, gives an account of an operation in which two linear rents were found in the jejunum involving the peritoneal and muscular coats only. He also noted in other instances linear ecchymoses and wounds of the peritoneal and muscular coats alone, associated with complete perforations. The view that the intestine escapes perforation in many of the cases that recover is supported by the fact that frequently so few abdominal symptoms are present. It is difficult to believe, however, that in all cases no perforation is present, for in many cases shock is severe, frequent vomiting persists for two or three days, the temperature rises, and the abdomen becomes rigid and painful, these symptoms being readily attributable to the shock of perforation and slight local peritoneal infection. The post-mortem examination in Mr. Cheatle's case, previously mentioned, showed that no extravasation of fæces had occurred from a perforation of the cæcum, and in cases operated on no free escape of fæces has been found before manipulation. Sometimes the presence of melæna has formed strong evidence of perforation. There is little doubt that a perforation may heal primarily or become shut off by adhesion to a neighbouring coil within a few hours.

In considering the cases in which operation is required we must first exclude those wounded who will die in the first twenty-four hours from intra-peritoneal hæmorrhage or from the shock of extensive internal injuries and who are not amenable to surgical treatment. Their number is always considerable, probably from 20 per cent. to 30 per cent. of those wounded.

Where increasing intra-peritoneal hæmorrhage is threatening life, and the surroundings and general condition of the patient allow of it, laparotomy must always be performed and the bleeding arrested, whether from torn vessels in the omentum or mesentery or from laceration of the liver or spleen. Only too often, however, extensive visceral injuries will also be found, and a favourable result will not be obtained. Wounds of the liver, kidney, and spleen as a rule heal well, and when hæmorrhage is not dangerous require no operative treatment except for secondary complications such as biliary fistula, hydronephrosis or perinephritic abscess. Laparotomy may be required when perforation of the stomach or bowel may have taken place. If we exclude those who die in the first twenty-four hours we may estimate that, of the cases of penetrating abdominal wounds amenable to surgical treatment, about 60 per cent. will recover. The recoveries, however, are chiefly among those cases in which the area of the small intestine is not crossed, and when this area is involved the mortality is probably very great. Too often without exploration we cannot be sure whether perforation exists or not, and whilst a routine laparotomy is not justifiable in every case, it should

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(*a*) Abstract of paper read before the British Medical Association, Manchester, July-August, 1902.

be performed at the first evidence that perforation exists. Such evidence may be found in the persistence of shock, a steady increase in the rate of the pulse, and in the abdomen becoming increasingly rigid and tender, and especially is it probable if vomiting has persisted and the passage of flatus is arrested. Under these circumstances, and when the surroundings are such as not to expose the patient to fresh dangers, the operation should not be delayed, and the apertures may be dealt with by suturing, or the area of the wound may be resected according to the condition found. Especially is the operation likely to prove successful when the injury is localised, the patient is seen within six hours of being wounded, and transport has not been difficult. When the bullet is retained, or the track is a complete transverse one, the prognosis is far less favourable. The results of laparotomy for gunshot wounds in war have been most unfavourable.

In the Spanish-American war Senn reported that all cases he knew of that were operated on died. In the Tirah campaign, of eight cases of penetrating wounds of the abdomen, five were operated on and all died. In the Boer war I only knew of two successful operations performed for wounds of the small intestine. In the American war in the Philippines Dr. Robinson reported that five cases were operated on and four died. The unfavourable results are attributable to various causes. The severity of the injuries, the delay in bringing in the wounded, difficult transport and the unfavourable surroundings, render abdominal operations at the front in most cases unpermissible. We are led to the following conclusions:—

1. That, as a rule, the conditions in a field hospital are not suitable for performing laparotomy. Moreover, many patients with penetrating abdominal wounds recover without operation, and in the case only of those who die the nature of the injury is such that death must result whatever be the conditions of operation, and an exploratory laparotomy may add a fresh danger to the patient.

2. When occasions arise in which the conditions of operation approximate to those in civil practice, laparotomy should be undertaken for intraperitoneal hæmorrhage endangering life, and when there is evidence that perforation of the stomach or bowel probably exists, provided that the patient is seen early enough.

CARBON MONOXIDE POISONING.

By T. O'CONNELL REDMOND, F.R.C.S.I.,

AND

JAMES C. McWALTER, M.A., D.P.H. (a)

In March of this year the Legislature requested the Massachusetts State Bureau of Health to give particulars as to the number of deaths from carbon monoxide poisoning, both before and after the introduction of water gas into the illuminating gas generally used.

The reply states:—

In the thirteen years previous to the introduction of water gas in Massachusetts (1876-88) the number of deaths registered as being due to poisoning from carbon monoxide in illuminating gas was eight.

In the thirteen years following the introduction of water gas into the illuminating gas the number of deaths registered due to illuminating gas poisoning (carbon monoxide) was 459.

Again, in Boston the proportion of carbon monoxide in the illuminating gas was exceptionally high in 1898 and 1899, and the number of deaths was 109, but as a result of agitation the proportion was reduced to nearly half in 1900 and 1901, and the number of deaths fell to thirty-nine.

We feel that an apology is perhaps due to the Association for quoting American statistics rather than British, but the latter are not available except in cases where deaths take place from carbon monoxide poisoning in factories. In these cases a recent order requires that his Majesty's Inspector of Factories shall hold a special inquiry. Dr. Whitelegge has already done some excellent work in this line, but as his official reports are available it is unnecessary to quote them. What seems really amazing is, that when the use of water gas as an illuminant is so fearfully fatal to life, as is fully proved by the above figures, the public health authorities should have absolutely no power to control its use, or even to specify the proportion which may be used by gas companies, whose only desire naturally is to supply an illuminant at little cost to themselves. This is all the more surprising when cases of carbon monoxide poisoning have already been made the subject of special legislation under the Factories Act. Surely the general public have a right to some protection against the indiscriminate poisoning by this gas, if the fact of being a worker in a factory entitles one to a special inquiry where it is suspected.

Water gas is supplied by the gas companies merely on account of the ease and cheapness of its preparation. It is made by passing steam over heated coke, and adding to the product the gas derived from petroleum or resin oil. This is mixed with the ordinary gas derived from the distillation of coke in proportions which merely depend on the fancy of the companies supplying the article, as there is no legislation to compel them to confine its use to any limit. Of course ordinary coal gas contains carbon monoxide in varying proportions, perhaps 6 to 8 per cent., and its poisonous properties are almost entirely due to it. Water gas, on the other hand, contains about 40 per cent. of carbon monoxide, and is many times more poisonous.

The peculiar pinkish tint of the body, the cherry redness of the blood, the changes in the hæmoglobin, the extreme congestion of the capillary vessels brought about by the general vascular paresis, the fulness of blood in the viscera, the remarkable resistance to putrefaction, the rose-red colouration often met with in the internal organs, in the muscles and in the serous membranes—all constitute a post-mortem picture not likely to lead one astray when there is a history of the probable cause. What we are rather concerned to investigate is the group of symptoms likely to be presented in those cases where there is a slow poisoning or intoxication with the gas, such as is now likely to occur in every city and in any house where the pipes happen to be leaky, or where operations in the gas mains are proceeding in the immediate vicinity. The literature on carbon monoxide intoxication is very scanty, and as the published accounts do not quite agree with our experience of the affection, we bring forward a few notes on the subject, with a view to stimulating discussion and observation rather than with any hope of adding to existing knowledge.

It is generally agreed that the first subjective symptom which comes on after breathing the poison is a burning feeling in the skin of the face, followed by giddiness and headache; the headache gradually growing more intense and the giddiness more marked: and, as Dr. Klebs has pointed out, its chief site is across the forehead. This is generally associated with a subjective feeling of strong pulsation in the temporal arteries. After this stage a feeling of intense anxiety and oppression, referred to the præcordial region, is generally observed, frequently followed and partly relieved by a sensation of nausea. Now come on a variety of subjective sensations which vary in every individual, as noises in the ears, motes dancing about *(muscæ volitantes)*, and occasionally feelings of exultation and excitement. It is mainly at this stage that the experiences of observers differ so much. According to our observations, persons in whom alcoholism is a usual occurrence are inclined to regard the sensations occurring at this stage as quite similar to those they have been accustomed to when indulging in their accustomed potations, and hence they regard them as rather pleasurable and desirable. Carbon monoxide does, indeed, produce a true intoxication, and hence it happens that its victims rather yield to its influence than fly for relief.

(a) Being a paper read at the Annual Meeting of the British Medical Association, Manchester, July-August, 1902.

This characteristic was well exemplified in a case brought in to us the other day. A Corporation labourer had been working in the street, over a broken gas main, and gradually develcped the symptoms of carbon monoxide intoxication. Instead of seeking a remedy, he persisted at the work—ripping up the road, of which every spade full was saturated with the gas. Suddenly he fell prostrate, and apparently lifeless. He was carried into the surgery and was found to be absolutely unconscious, although presenting none of that pallor usually associated with such a case. The pulse was good and the heart beat strong, but respiration was almost imperceptible, although the patient was a vigorous, well-built, broad-chested young man of the labouring class. The mucous membranes were of a lively red, and the diameter of the pupil scarcely affected. The jaws were clenched, and when ammonia was administered, the act of deglutition was performed with difficulty, the voluntary portions of the tract being almost completely paralysed; strong irritants applied to the nape of the neck produced scarcely any reaction, and except for the heat and the heart beat, all the appearances of death were present. Artificial respiration being vigorously kept up for about twenty minutes, the patient suddenly recovered. No sooner had consciousness completely returned than he assumed the bellicose attitude of one recovering from a drunken sleep, defied us to retain him, and refused to proceed to hospital in the ambulance which had been provided for him. As he was obviously still under the effects of the narcotic the police were requested to convey him for safety to the hospital, but he resisted their efforts and returned to his work, where in about ten minutes he collapsed again.

It has been asserted that the psychical condition which precedes the loss of consciousness is often a distress of mind full of agonising tortures, and less often a sort of pleasant or ecstatic feeling. So far as our observations have extended the latter is the more dangerous and the more common occurrence. Suicide by charcoal burning could surely not be so popular in France if the preliminary intoxication were otherwise than agreeable, and those cases of carbon monoxide poisoning which now occur so frequently, and in which the victim might have saved himself had he rushed to the door or the window, are unintelligible if we are to assume that any period of agonising torture preceded the final insensibility.

The class of cases in which the physician has to be most on his guard against the possibility of the air of the dwelling-house being contaminated with carbon monoxide is that of pulmonary diseases. The gravity of such an occurrence lies in the fact that the gas acting as a sort of anæsthetic on the mucous membranes of the bronchial tubes sometimes even checks the cough, and the patient, believing that he is rather improving, is content to lie in a lethargic and comatose condition in bed, unable to make any exertion, disinclined to get up, and losing all appetite until finally he is so exhausted that it becomes impossible to rally him. Such a condition was well marked in the case of a young married woman who kept a boarding-house in Dublin; she contracted a slight attack of bronchial catarrh, and was directed to remain in bed and submit to the ordinary treatment. After a week or so the cough disappeared, but she complained of great lassitude and anorexia. No definite sign of phthisis could be elicited, and there appeared nothing to account for the extreme debility, so the patient was ordered to the sea coast. Instead of going she sought one excuse after another for putting it off, and preferred to lie in bed, indifferent and careless to everything, but complaining of no pain. The appetite failed absolutely, and in a couple of weeks she died, apparently through sheer exhaustion. About a week after her death her sister, a strong, bright, buxom country girl, took a slight cold, and going to bed rapidly exhibited the same symptoms of apathy, anorexia and lethargy, becoming perfectly indifferent to every consideration of life or death. Careful search having been made for any possible cause for such a condition or any likely source for carbon monoxide, it was found that although there was no gas jet in the room, yet in a chamber underneath a gas stove used for cooking was leaking, and had been so for some considerable time. When this was remedied the patient rapidly got better.

One can only suppose that the great difference to be noted in attacks of poisoning—when in some cases the access of insensibility is sudden and consciousness is withdrawn, as by a stroke; and in others is preceded by phenomena indicative of great discomfort, anxiety, nausea, discomfort, præcordial distress—must be due to the proportion of carbon monoxide compared with that of fresh air. Thus in very badly ventilated rooms the ordinary symptoms of asphyxiation are added to those of intoxication, and the patient makes an effort to leave the poisonous atmosphere, or tries to get air by opening the window, &c., whilst the former phenomena are disclosed when the gas is inhaled in much greater volumes but in the open air. It has often been noted that insensibility attacks persons just as they are making to the door or window, when they fall down and lie unconscious. At this stage all perception of anything further is lost, and the victims can give no further account of themselves. In those cases which recover the subjective symptoms are very varied. Most usually there is a marked feeling of weakness and fatigue, lasting for several days and accurately corresponding to the objective symptoms of this stage. A certain dulness of intellect, a want of clear conceptions, vague headaches and general obscurity of the mental faculties are usually to be observed. In extreme cases the poison gives rise to profound functional mischief in the spinal cord, and then disorders of cutaneous sensibility and flying pains in the extremities are especially marked. In fatal cases the victim either never awakes from the deep coma, or he exhibits only transitory and imperfect returns to consciousness which again give place to fresh attacks of insensibility and more or less suddenly lead to death. The objective phenomena are numerous and varied. Thus the external surface of the skin shows much congestion and redness at an early stage, more markedly in the face; the ocular conjunctivæ is often affected, but the pupil may not be much contracted. The mucous membranes which can be seen keep for a long time their reddish tint. In the later connection the skin may become pink, but only towards the end does it exhibit any cyanosis, or livid hue, and then only in consequence of the disordered circulation. Some observers have noted many of the sequelæ of toxæmia such as are common to all such cases, including a variety of cutaneous affections, from a simple rose rash or the appearance of vesicles to extensive gangrene or symptoms which evidently depend on a vasomotor lesion.

Lendet described herpes labialis and herpes zoster as a consequence of carbon monoxide poisoning. Although the respiratory functions are not always very prominently affected it is far more general for the initial stages of dyspnœa to be succeeded by a comatose condition, when death may occur without marked convulsions. As a rule, however, convulsions do occur in the final stage of the poisoning. Pathological changes in the organs of respiration, such as acute bronchitis, pleurisy, pneumonia, or hæmoptysis, are not uncommon. Klebs considered such complications to be accidental, and due to the presence of other irritants, whilst Friedburg believed them to be directly dependent on the carbon monoxide. They are probably due mostly to the disordered condition brought about by the narcotic poisoning, and partly to the irritating action of the mixed gases on the bronchial tubes.

The arterial pulse is at first full and quickened, but later on becomes gradually less powerful, and in the fatal stage of course can scarcely be felt. The temperature of the body is usually decreased, perhaps as much as four or five degrees. As regards disorders of the digestive organs vomiting seems rather common in chronic cases of poisoning, and Ziemssen and Thomson have described extensive inflammation of the mucous membrane of the digestive tract, with a tendency to necrotic ulceration. Diabetes and albuminuria may both occur, but are usually transitory.

The disorders of the nervous system are sometimes local and sometimes general. Paralysis of the voluntary muscles may take place, and is often followed by atrophy of the muscles concerned. Anæsthesia of the cutaneous surfaces is not uncommon, and paralysis of the involuntary muscles of the bowels and bladder have been recorded.

The duration and the intensity of the action of the poison must, of course, determine the result in persons exposed to the inhalation of carbon monoxide. Fatal cases occur chiefly at night when help is not at hand, and that intervention, which, if timely, might have saved life, comes some hours after unconsciousness has set in. If the poisoned person be more or less quickly removed from the injurious vapours, recovery often takes place rapidly, but, when the injurious symptoms persist, death may occur in a day or two, in spite of all remedial measures.

As regards antidotal measures we have nothing very new to suggest. Artificial respiration, kept up by relays of volunteers, with ammonia and stimulants internally, and ammonia to the nose and spine, have proved successful in our hands. When, in spite of these efforts, the threatening symptoms persist, Traube and others recommend depletory transfusion of blood; that is, the poisoned blood is first removed, and a corresponding portion of the normal blood of a healthy man is substituted by ordinary methods of transfusion.

These remarks are, after all, the mere commonplace of the subject of carbon monoxide poisoning, but what we wish to press on the earnest attention of the State Medicine Section is that public health authorities have absolutely no power to deal with the quality of the gas supplied by the gas companies. They may be merciful and give us a coal gas containing 8 or 10 per cent. of carbon monoxide, or they may mix it with as much water gas as will bring the proportion up to the 30 or 40 per cent., but the medical officer of health or the local sanitary authority has absolutely no power in the matter.

Again, those gas pipes which were impermeable to ordinary gas may leak with a change in the composition of the gas, and hence in its pressure and gravity is made by the lighting company. Then the deadly gas, finding its way into the sick room, may determine the death of many a patient suffering from pulmonary or cardiac disease, and yet we are powerless to prevent it, at least until we so study the subject that we shall be able to satisfy the legislature of the need of controlling the proportion of poison in the illuminant with which any company may supply the public.

Before leaving the subject we may be permitted to refer to a very fruitful source of carbon monoxide poisoning, namely, that caused by the saturation of the soil from leaking gas mains, and the periodic exhalation of the gas, either when the ground is turned up in the process of road repairing, bursts of gas in water pipes, excavations, &c., or its liberation on account of variations of temperature on the surface, or the changing bed of the ground water.

Pettenhoffer, as is well known, demonstrated that the incidence of enteric fever in Munich depended on the varying level of the ground water, and Sir Charles Cameron explains the prevalence of this disease in Dublin by saying that it is a water-logged city, reposing on a bed of ground water of varying, but always slight, depth.

It appears to us that the notoriously high death-rate of Dublin needs some other explanation than this, especially as it remains abnormally great even when the zymotic death-rate is well below the average.

Now it would seem that of all the lighting gas produced in the Dublin gas works 10 per cent. is absolutely lost before it reaches the consumers' meter. The company naturally take no interest in its fate after it has left that interesting recorder, but as they presumably do everything possible to check the wastage on their side of the meter, and are apparently unable to reduce it below ten per cent., it may fairly be assumed that another ten per cent. is lost between the meter and the consumers' burners. As regards those thousands of cubic feet which disappear every day in the gas company's side of the meter, what becomes of it is rather a mystery. For our part we believe that it saturates the soil, and is evolved therefrom with results that are very frequently fatal though apparently often unperceived. The following case seems to prove this—at least one of us was able to persuade the coroner that the fatality was due to carbon monoxide :—

In November, 1901, the inhabitants of a middle-class house on the north side of Dublin—a man and his wife, noticed a somewhat peculiar, but not unpleasant smell through the house. It never struck them as being the smell of gas, nor was it suggestive of bad drainage, yet they felt queer, powerless and dazed, and both of them lost their appetites. Husband and wife were attacked similarly, and they experienced an intense thirst, consuming large quantities of lemonade. At night they shut the door as usual and went to bed. In the morning the man was so weak that he could scarcely get out of bed, but he managed to dress and go downstairs. His wife had a headache, she could not rest, her heart was leaping, and she was very weak; there were other inhabitants in the house also affected, and though nobody seemed to suspect the source of the smell they were advised to leave the door open. This the owner refused to do, and all retired to bed as usual the following night.

In the morning the neighbours noticed that nobody was stirring about the house. After some time they got uneasy and commenced knocking at the door. Finally a man staggered down to the door, the rest of the dwellers were in bed insensible, and one old man upstairs was dead. The others were brought to hospital and eventually recovered. One of them was three days unconscious. During the night it seems that they had all been quiet, although one of them retched a great deal. A peculiar characteristic which we have alluded to above, was that nobody felt any dread of the smell; they could not be got to believe that it was gas. The man who had been unconscious for three days states that his only strong feeling was "to throw himself down anywhere at all," and that he finally lost all memory and felt as if in a trance. This man ought to have been almost immune to gas poisoning, as he was an engineer working a gas engine at Broadstone Factory. He never experienced the slightest inconvenience at it, although the fitter whose duty it was to overhaul the engine occasionally would frequently complain of the nausea and discomfort which it brought on.

This case, we submit, goes to prove what we have contended for above—namely, that carbon monoxide is a narcotic poison; that it is so far from being disagreeable that no effort is made to escape from its influence; that it is the probable cause of many unexpected deaths which have not been carefully inquired into; and we suggest that legislation is urgently needed to regulate the output of carbon monoxide in burning gas.

THE DIETETIC TREATMENT OF PULMONARY TUBERCULOSIS. (a)

By NOEL D. BARDSWELL, M.D., M.R.C.P.,
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AND
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Before referring to the special factors which influence the diets for consumptives, it is necessary to consider the physiological diet.

A physiological diet for an average man of eleven stone, doing moderate muscular work, may be considered to contain 120 grammes of proteid, 110 of fat, and 365 of carbohydrate, with a calorie value of 3,098. If this same man were "at rest," *e.g.*, doing clerical work, he would require only 2,500 calories Such a diet as the following would be required: Proteid 120, fat 110, carbohydrate 240.

Many people, however, live constantly on smaller diets without showing any obvious signs of under feeding. They live chronically under weight at a low nitrogenous level, and have a lowered resistance to tuberculosis.

Allowances must of course be made for sex, age, weight, work, weather, &c.

We have next to consider the additional factors due to the existence of tuberculosis.

1. The presence of tuberculosis causes increased waste of all tissues, especially of fat. The indication is therefore an increase in all constituents of the physiological diet.

2. The patient may be under normal weight. A sufficient increase in diet, especially as regards fat and carbohydrate, must be made to restore the tissues in addition to meeting the current requirements of the body.

3. Clinical experience and experimental work have shown us that, equivalent for equivalent, proteid has a much greater effect in inducing arrest of tuberculous processes than either fat or carbohydrate. In fact good results have so consistently been obtained on relatively high proteid diets that we now invariably make use of them.

The advantage of a diet rich in proteid and only slightly increased in fats and carbohydrates are as follows:—

(*a*) There is no necessity to prescribe large amounts of fats, starches and sugars, which are all disliked by the consumptive.

(*b*) Proteid can be given in large quantities in liquid form in milk, and milk can be largely fortified by the addition of any of the numerous casein preparations in the market, *e.g.*, plasmon.

(*c*) It is much easier to give proteid in large quantities than either fat or carbohydrate. This is of importance when prescribing a diet of small bulk to patients with atonic dyspepsia and commencing dilatation of the stomach.

(*d*) Weight is put on at a moderate pace only, hence the physiological balance of cardio-respiratory functions and body weight is not upset as when excessive fat weight is gained rapidly.

4. Intestinal absorption, &c. During the past eighteen months we have devoted considerable attention to this subject, and the following conclusions are based upon the results of an extended series of experimental investigation. (*a*) The percentage absorption of proteid is normal on moderate diets, and falls somewhat when very large diets are given, but even then is very rarely below 90 per cent. of the total proteid taken.

The absorption of fats is also normal, and in cases under weight is frequently higher than normal. This absorption remains very high even when very large amounts of fat are taken, *e.g.*, a patient taking 231 grammes of fat absorbed 96 per cent. This good absorption of proteid and fat lasts till death, *e.g.*, 93 and 97 per cent. respectively were absorbed till within three days of death in one case.

Apart from lardaceous disease of the intestine, of which condition we have not yet sufficient data to warrant any definite opinion, in all probability acute diarrhœa alone interferes with absorption.

In short, our researches have shown us that the consumptive, of whatever clinical type, digests and absorbs at least 90 per cent. of proteid and fat of all food he retains, and the probabilities are that he deals equally well with his carbohydrate. It has been a source of interest to note that most pronounced anorexia and dyspepsia coexist with normal absorption, and the gastric analyses in such patients afford evidence of normal secretions.

Although the condition of the stomach secretions give no dietetic indications, the stomach in other respects has an important bearing upon the constitution of the diet since atonic dyspepsia and dilatation are among the most serious complications the sanatorium physician has to guard against.

5. Another factor to be remembered is that patients can be overfed; the good absorption already referred to makes this an easy matter. "The fat, plethoric patient, so breathless that he cannot move across the room without great dyspnœa, probably a stone or more above normal weight, and who has overstepped the capacity of his lungs and heart," is the able description of the overfed consumptive given by Sir Douglas Powell.

Having discussed the chief factors to be considered in determining a diet, we will now describe the actual diets. In practice we use diets yielding from 120 to 160 grammes of proteid daily for men, with a proportionate reduction for women; with regard to fats and carbohydrates we give amounts that we consider sufficient to supply the current demands for energy, and to restore wasted fat at a moderate pace. The following would be such a diet for a man normally eleven stone in weight, about a stone below weight, with but slight disease, slight constitutional disturbance, normal alimentary tract, and walking five miles daily. Proteid 140, fat 140, carbohydrate 270, being an increase of 20 proteid, 30 fat, and 30 carbohydrate on the normal diet for the same man.

(a) Abstract of a Paper read before the Annual Meeting of the British Medical Association, Manchester, August, 1902. Towards the expenses of this research a grant was made by the Scientific Grants Committee of the British Medical Association.

The composition of the diet would be as follows:—

7.30 a.m.—Milk ½ pint.

8.30, Breakfast.—Milk ½ pint, bread or toast 2 ozs., butter ½ oz., 2 ozs. fish or bacon, &c., and an egg.

11 a.m.—Milk ½ pint.

Lunch, 1.30.—Milk ½ pint, bread 2 ozs., butter ½ oz., fish 2 ozs., meat 3 ozs., milk pudding 5 ozs.

Dinner, 7 p.m.—Similar to lunch, but with only 2 ozs. of meat; 10.30, milk ½ pint.

These figures are only approximate, as the actual diet was prescribed in the metric system.

On this diet the patient recovered his lost weight at the rate of two pounds a week, and made an excellent recovery in every respect.

It is of interest to compare this diet with another sanatorium diet which has come under our notice.

Breakfast.—2 pints of milk, bread about 5 ozs., butter 3 ozs., and an omelette containing 3 eggs or an equivalent of other foods.

Lunch.—Milk 2 pints, large plate of curry, roast meat 4 ozs. (about), potatoes 3 or 4 ozs., green vegetables 2 ozs. with melted butter, milk pudding 8 ozs. or more with cream.

Dinner.—Similar to lunch, but with no curry, but with the addition of 5 ozs. bread and 3 ozs. butter. It is almost unnecessary to add that atonic dyspepsia and vomiting was the rule in this institution.

When the existence of atonic dyspepsia renders it necessary to conserve the tone of the stomach, we concentrate the diet by excluding all indigestible articles and those of low nutritive value, such as green vegetables, soups, sauces, &c. If this is insufficient we further concentrate the diet in various ways, a description of which would be too long to include in this paper.

In conclusion, we wish to point out that although overfeeding is frequently associated with very satisfactory progress in the lungs, yet the administration of what is practically only a small increase on the physiological diet is quite sufficient to ensure equally satisfactory improvement in the lung condition with much less risk of injurious consequences, and with the minimum discomfort to the patient.

SOME POINTS IN THE GENERAL MANAGEMENT OF ASYLUMS FOR THE INSANE.

By LOUIS VINTRAS, M.D., B.Sc.,
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Few positions require more forethought, tact and power of organisation than that of superintendent to one of the large asylums for the insane, if it be desired to raise the management of such an institution above the mere routine of tradition. There is, at the present day, still too much conservatism, too much running on old lines, in the way in which we treat the insane, and this probably explains in part how it is that we have made comparatively little progress in dealing with this problem, which is ever increasing in magnitude. Of the medical men who, in the early part of their career, take posts as assistant medical officers in asylums, not a few tire of waiting for advancement, and soon drift into other and more immediately lucrative paths of their profession. A few remain, but of these some, by the time they have reached those positions, where they have a freer scope for the exercise of such personal views and influence which should be the result of experience, have lost the freshness of their enthusiasm, and, disappointed by the hopelessness of most of the cases, are content to continue merely the application of such methods as they have been long familiar with, without seeking to introduce any new elements or improvements. Yet it is to the general management of these patients that we must look for any progress in the treatment of the various forms of insanity, for we know from the very nature of the lesions how little we can expect from the exhibition of drugs and other therapeutical agents. It is by striving to reawaken the dormant activity of the diseased cells, wheresoever there is the remotest possibility of doing so, by such natural methods as are at our disposal, that alone we may hope to do good. We must bring ourselves to look less and less on our asylums as places where those whose mental balance has been disturbed are permanently kept out of the way and prevented from doing injury to themselves or their fellow-creatures. That this was, and is still, the primary *raison d'être* of such institutions is nothing that we need feel ashamed of, but this constitutes only one-half of our duty. We must turn our thoughts now to giving to our asylums a wider and more humanitarian meaning, by gradually converting them into sanatoriums. From mere places of safety they must become places for possible cures.

It is not to be expected that any marked step can be made at once in the treatment of so widespread and complicated a series of pathological lesions as those included under the generic name insanity; but gradually, very gradually, by encouraging those in authority in the various asylums to express in a practical form the views which they have come to entertain from their every-day observations of the tastes, requirements, habits and limitations of those under their care, we may frame a system by the judicious application of which some more tangible results may be obtained than it is our lot at present to command. And it is certainly only by encouraging personal initiative in, and by giving a freer hand to the heads of, our institutions for the insane that any progress can be made. Much, however, can be done in preparing the way at all times by those who take more than a perfunctory view of their responsibilities.

It would be outside the scope of these suggestions to enter into the details of so extensive a subject, and I must content myself with touching on one or two of the more important aspects of the question, which will illustrate my meaning and show how carefully the foundations of any new work in this direction must be laid. First, it is absolutely necessary that the general management of an asylum for the insane should be given to men of strong personality, men capable of influencing those who are working under them and of gradually imbuing the entire staff with the spirit of the ideas which they wish to put into practice. In giving a man the supreme control of such institutions, which are veritable communities, with a social as well as a medical interest, it should not be deemed sufficient that he has passed a certain number of years doing the routine work of an asylum. A man who is to be placed at the head of some hundreds of people should have other and more sterling credentials, and his fitness for the post depends on the personal asset of ideas he brings with him—the newer and broader views which will help towards the solution of the many problems he will have to face. Because a man is an excellent second is no criterion that he will be equally excellent in command.

Then there is the staff. Here we too often meet with people absolutely unsuited for their delicate mission, or in whom habit has killed all interest. These should be gradually but unrelentingly weeded out. Too much care cannot be taken in the selection of those who will be continually with patients mentally afflicted. Many people who have no absolute predisposition to any of the forms of insanity, but who are nevertheless of a retiring, brooding disposition—what is sometimes called "eccentric," and generally means morbid—are often apt to try and devote themselves to the care or nursing of the insane. These should be carefully dissuaded from such a step, for their influence on those they would benefit can only be unsatisfactory. It is those who are robust of mind, rather than those who are robust of body, who will make the best attendants for such cases. Cheerfulness, a satisfactory reason for entering on such a career, and a certain fine pity for the afflicted, with a common-sense view of life, will be the best attributes in those who are called upon to form the staff of an asylum. Once a suitable staff secured, they should, one and all, be made to understand that they are co-operators in a great humanitarian work, not simply keepers.

Then comes the all-important question of the inmates. It is impossible at the present time to formulate any particular theory, but I should like to emphasise certain faint indications as to a possibly more satisfactory dealing with the insane, when confined in an asylum, than has been the case in the past. Much has been done already in providing a certain amount of recreation for the inmates, and with excellent results so far as they go, but recreation pure and simple occupies the mind without, however, setting the mind in motion, so to speak. Occupation has also been provided for suitable cases, both in our asylums and abroad, but it is generally occupation of a mentally passive kind. On the contrary, should not our aim be, whenever we can, to make the brain of the patient work, to make him think, understand, remember? Elementary classes could be held in such subjects as history, geography, natural history, the teacher's descriptions being further emphasised by simple diagrams such as those excellent pictures issued by one of the societies for the promotion of Christian knowledge. The more intelligent could be given tasks to learn, and those who were successful encouraged by small prizes, to be given at the end of the course. In fact, it should be sought to re-open their minds in the same way and by the same methods as one opens the mind of a child. Of course, it would all have to be done in a very careful and tentative manner. It is already being tried here and there, but too much on the old lines, simply to afford distraction, not with an ultimate curative intention. The work must not be manual. Those who could not be persuaded to attend these classes could be taken into the garden and taught the more usual knowledge of flowers, which all those mentally afflicted love; then another day asked to repeat what they had been taught. Again, simple puzzles, such, for instance, as those now appearing in some of the papers and magazines, where some simple image suggests the name of a town, could be distributed at all times through the wards and prizes given to the successful competitors. The difficulty would be to induce the patients to interest themselves in these competitions, but it would suffice that, one or two started, the others, on seeing the prizes, would soon join in. These are only a few among many possibilities.

What strikes one in going through any asylum is the general listlessness of the inmates, the passivity in which they are left and which is most detrimental to them. Reading aloud to them short, simple, interesting stories in the wards or at meal time should be much more in vogue than it is, and this could be done by outside helpers, for many who have spare time would be only too glad to devote some of it to such good purpose. It should be sought as far as possible to make the inmates realise that they are members of a community and take interest in pursuits in common. For this, and as a clearer understanding of their abilities was arrived at, it would be probably advisable to divide them accordingly, and not merely as is done at present into acute and chronic cases. Theatricals, dances, music, are all very well, but there is an element of excitement about them, while such occupations as I have suggested would be of everyday occurrence, and would partake of something of the regularity of school life.

It is by working after such or similar methods that the general management of our asylums will find its more utilitarian, mission and a step forward be made in the more rational treatment of the insane.

France.

FRENCH MEDICAL HEROISM.

By F. R. Wolfe, M.D., F.R.C.S.Edin.

Amidst the constant and sudden changes which are taking place in this country, and the disappearance of some of our most cherished institutions, it is satisfactory to find that the race of medical enthusiasts is still flourishing. I had the pleasure the other day of making the acquaintance of Dr. Paul Garnault, a gentleman who has inoculated himself with matter from a tuberculous cow, in the expectation of producing in himself general tuberculosis, and thereby to prove the identity of bovine and human tuberculosis. In reading the notices which have been published in the daily papers regarding Dr. Garnault's procedure, one is apt to dismiss the case merely as an attempt to court notoriety; but on personal contact with that gentleman, and a critical examination of his large work on the subject, consisting of 1,050 pages, which was published the other day (a), we are forced to give him credit for being an able and serious scientific worker, and we are ready to agree with Professor Blanchard, who speaks of "Dr. Garnault's heroic self-abnegation" in terms of profound admiration. I remember one Paris physician who applied a diphtheritic membrane to his tonsils, and another who swallowed a pill made of the excreta from a cholera patient. The late celebrated Professor Pettenhoffer, of Munich, also drank water containing cholera bacilli. These experiments were made to prove the innocuity of the substances, but Dr. Garnault's object is to prove the fatal effect of the experiment.

The psychological process by which he has been led to this determined attempt at self-slaughter is quite natural under the circumstances. Garnault is a Doctor of Medicine as well as a Doctor of Natural Sciences, ex-Chef of Zoology and Comparative Anatomy of the Faculty of Science of Bordeaux, and Member of the Anthropological Society of Paris, and has published several works on these subjects. He has, moreover, taken part in the movement to enforce the law against the sale of flesh and milk from suspected animals, it being his belief that 100,000 children besides adults die every year through the infection of bovine tuberculosis. He *was* a staunch adherent and admirer of Professor Koch, and attended the memorable London meeting in July last year. The meeting was intended to be a great demonstration—a crusade against tuberculous flesh and milk. Professor Koch, who was expected to support the crusade, by some new development of his theories, informed the meeting that from recent experiments which he had made upon animals, he found that tubercle in animals (perlsucht) was quite distinct from human tubercle and that they are not transferable to one another, and that the flesh and milk from tuberculous animals were quite safe for consumption.

(a) "Le Professeur Koch et le Péril de la Tuberculose Bovine."

The consternation of the meeting at this pronouncement can hardly be described. It was as if the late Mr. Spurgeon had used the occasion of a revival meeting in his tabernacle to announce his going to join the Church of Rome; or if Pope Leo himself had proclaimed his conversion to Scotch Presbyterianism. The day following the London meeting, the late Professor Virchow, addressing the Clinical Society of Berlin, said that for the last ten years he had been teaching that, bovine tuberculosis (perlsucht) was quite different from human tuberculosis, and he was at a loss to see how they could be considered identical. The German Government appointed a Commission to examine the question, Virchow being its leading member. "At that meeting," he said, "I shall insist to distinguish between *pathological* and *bacteriological* tubercle. The bacteriologist, when he dissects a wart and puts it under the microscope and discovers a bacillus, thinks that there must be millions more, and calls it tuberculous, but the bacillus does not constitute tubercle. I am not afraid to eat flesh or drink milk which contain bacilli," &c.

After the publication of the opinions of Koch and Virchow, the subject was made the sport of the French Philistines. Mons. Theodore Denis (Member for Lourdes) made an eloquent and humorous interpellation at the meeting of the Chamber of Deputies, March 20th, 1902, on the tuberculous flesh and milk question. Referring to the opinions of Koch and Virchow, he said: "Everybody rejoices at the declarations except the veterinarians who make an outcry against the German savants." "What right have these Berliners to interfere with our bacilli? Let them mind their own business. Let us be armed with our tubes to defend the sacred microbes who nourish our families!" Referring to the number of poor children who die in Paris annually from the infection of tuberculous milk, Mons. Denis said, "I cannot get genuine milk in Paris. I advise some members to visit the populous districts and ask for a drink of milk. You will get water and chalk or plaster. You will get colic, but no tuberculosis."

To combat these pernicious errors Dr. Garnault has thrown himself into the breach. When the soldier seeks the bubble of reputation at the cannon's mouth, why should the man of science, in a great emergency, hesitate to reap immortality by offering himself as a holocaust to science and humanity? Besides, it is a good principle, from which, if bacteriologists were to adopt it, we might get more trustworthy results. Dr. Garnault went to Berlin and offered himself to Koch for experimentation; but, as Koch and other medical authorities refused responsibility, he performed the operation upon himself in the presence of two medical men. In the first operation, having applied a fly blister to the forearm, he went to an abattoir, where the blistered epidermis was removed and the raw dermis scraped with a bistoury. Tuberculous substance from the ganglion of a tuberculous cow was applied to the wound and secured by a bandage. There was no fever nor ganglionic disturbance at the armpit.

The first experiment having proved negative, he operated a second time by making an incision into the dermis, lifted it, and put into the wound tuberculous matter from the liver of a tuberculous cow. No reaction and no ganglionic disturbance followed. The wound suppurated. A section of the skin being then examined microscopically giant cells and bacilli were discovered. Another part of the section and some pus was given to Pasteur's Institute, and used to inoculate guinea-pigs, &c. The result of this inoculation has not yet been ascertained. Dr. Borell, of the Institute, who acts for Dr. Roux, just now tells me that all the steps of the process were done antiseptically and *secundum artem*, and he expects shortly to report.

Dr. Garnault, age 42, of robust health, has no family. Should the operation prove successful, he will not undergo any treatment for cure, but bequeath his body to the Academy for post-mortem, who will very likely raise a statue to him beside that of Bichat.

Germany.

[FROM OUR OWN CORRESPONDENT.]

Berlin, September 6th, 1902.

At the Society for Medicine Dr. Glaser discussed the Significance of the Typhoid Bacillus in Diseases of the Respiratory Tract after Typhoid Fever. He reported two cases. A physician, æt. 31, had worked with typhoid cultures of a highly virulent type, and was attacked with the disease. After fourteen days he developed pain in the chest, shortness of breath and fever, pneumonia of both lower lobes, and rust-coloured expectoration. In the fourth and fifth week right-sided empyema appeared, with highly virulent bacilli in the discharge. The empyema disappeared partly after aspiration and partly by expectoration. As only typhoid bacilli were found in the expectoration it might be assumed that only typhoid bacilli were present in the lung patches, and that these had set up the changes in the lungs. The prognosis of an empyæma so set up was, he observed, more favourable than if set up by streptococci. Generally, in lung complications in connection with typhoid, pneumococci were the exciters. When typhoid bacilli were found in expectoration or in the tissues after death, it was not proved thereby that they were the exciting agents of the complication, for, as a rule, pneumococci were also found, and in such quantities that they must have been the agent in the production of the disease.

This accessory *role* of the typhoid bacillus was shown by the following case. A woman, æt. 45, became ill with symptoms of pneumonia in the right lower lobe, and at the same time she had all the symptoms of typhoid fever. In the rusty expectoration, along with pneumococci, were bacilli that resembled those of typhoid, but no pure cultivation could be obtained. By puncture at the site of dulness, lung juice was obtained. The autopsy showed that the case was one of typhoid in the seventh week. There was also a fibrinous pneumonia in the right lower lobe. Microscopical examination of the hepatised tissues showed quantities of pneumococci, but only a few bacilli resembling the typhoid bacillus. These could only have been of accessory importance, the exciters of the pneumonia being the pneumococci, and the typhoid bacilli had only reached the part in the blood by accident.

In another case the bacilli were present in the expectoration in large quantities. A man, æt. 29, was convalescent from a moderate attack of typhoid fever. In the fifth week dulness suddenly appeared in the right lower lobe of the lung. The rather free expectoration was in parts distinctly rusty. There was also pleural exudation on the right side. After a few weeks the patient recovered. Examination of the expectoration showed, along with pneumococci, numerous bacilli that resembled those of typhoid. Cultivation showed two distinct colonies—pneumococci and typhoid bacilli. The bacilli could be seen in the expectoration for fourteen days. In a patient of Dieudonné's they persisted for seven weeks. It was important to recognise the nature of the bacilli quickly in order to avoid infection from the expectoration. As regarded the differential diagnosis of lobar pneumonia in the course of typhoid fever, Curschman had observed that in typhoid pneumonia the sputum had a hæmorrhagic character and this observation had been confirmed by others. A. Fraenkel, on the otherhand, held this hæmorrhagic expectoration to be a sign of hæmorrhagic infection.

The *Deutsch Med. Z.*, No. 68, contains a reference to a contribution towards the

Treatment of Puerperal Fever by Crede's Silver Ointment.

This ointment, known commercially also as collargolum, has been much recommended in all cases in which the strepto- or the staphylo-coccus is the originator of the disease.

A woman, æt. 39, who had had four children and three miscarriages without trouble, developed infection soon after her confinement. From this developed inflammation and œdematous infiltration of the pelvic tissues, especially between the layers of the left broad ligament. This parametric exudation gradually extended up to the crest of the ilium, then backwards and downwards almost to the anus. In spite of the use of the silver ointment the swelling remained for months. At first the temperature was rather high with intermissions, and the inunction of 24 grm. of the ointment from the seventh to the eleventh day had no marked effect in reducing the temperature. The fever did not cease until the third day after the eighth inunction. The author thinks it possible that the silver ointment caused the cessation of the high temperature.

The same journal records a

Rare Complication of Puerperal Fever.

A woman, æt. 28, became feverish on the second day after delivery, the temperature at first being 39° to 40°, and for ten to twelve days it was 39° in the morning and 40° in the evening. But the patient was subjectively well and in good spirits; the abdomen was neither distended nor painful. After this time the fever subsided, but a swelling like phlegmasia alba dolens developed in the left thigh, which was doughy but not painful. A week later a similar swelling appeared in the right forearm. A large quantity of pus was removed by incision. A sound passed deeply and encountered the rough bone of the femur denuded of periosteum. After some time the incision had to be enlarged, after which the patient recovered. Possibly, it is suggested, the case was one of self-infection from passage of bacterium coli from the intestines, or the germs of erysipelas from the inner surface of the uterus. All antiseptic precautions had been used, and the uterus had even been washed out with a rather strong solution of sublimate—1 in 2,000.

Austria.

[From our own Correspondent.]

Vienna, September 6th, 1902.

Delayed Rickets.

At the "Gesellschaft für Innere Medizin" Gottlieb showed a case of severe "florider rhachitis" arising from fæcal retention.

The patient was a boy, æt. 7½, of robust parents, who was born healthy and strong, and had four healthy sisters. Beyond an attack of mumps there was no other history of febrile attacks. He seems, however, to have suffered from dyspepsia, with alternating diarrhœa and constipation. About the end of his first yearof life rickets appears to have set in, which, judging from the history, did not yield to treatment. Of late the child had been growing weaker, the bowels more confined, and his general condition so alarming that the parents brought him into hospital.

On admission he appeared very pale, emaciated, and extraordinarily backward; he could neither walk nor stand, and could only creep on the floor with great difficulty. He was 80½ centimetres in length, or 31½ inches, and 11 kilogrammes, or 24·2 lbs. The cranium was slightly rachitic, but not so much as usual. The contour of the thorax was strikingly malformed and irregular; the upper and middle portion being greatly constricted, while the sternum stood forward like a wedge, and the convexity of the ribs was converted into a concavity. Both hypochondria were immensely enlarged, this giving a small appearance to the chest. Both clavicles, as well as the ribs, had large deposits of callus, as if fractured in many places. There was also kypho-scoliosis, which further added to the deformity of the chest.

The respiratory sounds were puerile but no râles; the heart greatly displaced; but no morbid change could be discovered in the sounds, although the pulmonary valve was slightly accentuated in the second sound and the respirations accelerated to forty in the minute. The extremities were greatly emaciated and the inactive muscles soft and atrophied. When resting in bed the legs formed a ring, with the abdomen, which was enormously enlarged, filling the circle. On palpation firm swellings about the size of hen's or pigeon's egg were to be found in the bowel. These were of an ovoid shape, moveable, and without pain on pressure, but into which the finger could be slowly pressed, leaving an indentation, a symptom which Gersuny has termed "Klebs-symptom," as pathogenic of fæcal matter retained in the bowel. To relieve this accumulation "high irrigation" was performed with 1½ litres of water, and an enormous mass of dark, offensive, and scybalous fæces dejected, with considerable pain to the child. After three repetitions the tumours all disappeared.

In the diagnosis it must be admitted that there was a "causal nexus" between the rachitis and these fæca tumour formations; the conjugate diameter in this boy was only 2½ centimetres, which is not an inch wide, being only 0·984 in. We may therefore conclude that two forces were active in the production—(1) the mechanical obstruction in the discharge of well-formed fæces, and (2) by the narrowing of the pelvis, a dislocation of the sigmoid flexure, which in children is relatively large and thus easily producing looping of the bowel, and further increasing the difficulty of the passage of the fæces, as in "Hirschsprung" disease.

The treatment must be rational: First remove all fæcal accumulations by careful washing out, but never by purgatives, applying massage to the inactive abdominal muscles; give phosphorised cod liver oil, good diet, and orthopædic interference if really found necessary to correct any deformity and relieve the free passage of ingesta.

Offer next gave a record of the examination of the patient's urine, in which there was a large quantity of aceton, and about 0·1 per cent. of sugar. He said this was a common occurrence when tumours were present in the abdomen, but not usually observed in constipation, although it is reasonable to suppose that any form of compression on the large lymphatic vessels will produce the same morbid change of glycosuria. This concords with Biedl's experiments on animals, as he found that tying the ductus thoracicus or conducting the lymph out of the body produced sugar in the urine. He related the case of a man under his care, with all symptoms of an abdominal growth, which was diagnosed as the pancreas at first, but subsequently not so, as there was no fat in the stools, while iodoform glutinoids and salol were physiologically split up—yet there was glycosuria. The final diagnosis was compression of the ductus thoracicus by some morbid mass and this was confirmed by the abduction.

Schwarz remarked that the appearance of alimentary glycosuria through the closing of the ductus thoracicus was not free from objection, although experiments on animals had been successful in demonstrating this fact.

He had in his mind when he said this a case which he carefully followed where no such morbid product ever appeared, though genuine chylous ascites was present, in consequence of complete closure of the thoracic duct. The case commenced with cirrhosis of the liver, atrophy, closure of the duct, finally terminating in œsophageal carcinoma.

Secondary Carcinoma of the Pleura.

Sorgo demonstrated the origin and descent of epithelial cells in secondary carcinoma, which has often been debated with very little success. With the aid of the microscope he endeavoured to show four different types of cells: (1) The round large cell, varying in size from five, ten, or more times that of a white-blood corpuscle, having a clear nucleus with fat in the protoplasm. (2) The epithelial polymorphic cell, whether oval, crescentic, pear-shaped, or caudate. These cells have usually out-growths, or strangulated portions, and nuclei in subdivision. (3) Vacuolar cells. (4) Cell-union, which comprises a large type of forms ill to define.

On referring to the literature on the subject and different methods of diagnosis, he found the various elements in the product were regarded as important, such as—(1) Hæmorrhage or chylous fluid, which, he thought, was of less value than the glyco and fatty degeneration of the cell. (2) Epitheloid element, with or without vacuolisation, which is highly suspicious of a neoplasm. (3) The polymorphic, polynuclear and giant vacuolar cells are also regarded as indicative of neoplasms. (4) Primary epithelial cancer has, as a rule, a small amount of exudation, while secondary carcinoma has a large quantity. A rich cellular serous fluid also bespeaks secondary carcinoma, but purulent hæmorrhage with this condition is not confirmatory evidence. (5) The form and arrangement of the cells not infrequently give an exact histological diagnosis of the case. Among other recommended confirmatory tests of secondary cancer thrown out for the student are the sediment, hardened, cut, and then examined, colouring of the mucus, or the formation of the epithelial fibres.

The Operating Theatres.

KING'S COLLEGE HOSPITAL.

Operation for Colotomy.—Mr. Barrow's Method.—Mr. Boyce Barrow operated on a man, æt. about 55, who was suffering from extensive malignant disease of the rectum. An incision was made through the abdominal wall about midway between the umbilicus and the anterior superior spine (being a little nearer the latter). The peritoneum was opened, and the colon then brought out of the wound; the situation having been selected in the gut suitable for the artificial opening, the next step was to make an opening into the meso-colon sufficiently large to admit the fingers, this opening being under the selected spot in the colon. Sutures were next passed through the abdominal wall incision a little below its centre, passing underneath the colon through the opening before made in the meso-colon, joining the incision for a short distance nearly at its centre and thus dividing the opening in the abdominal parietes into an upper and lower part, so that the colon passing out through the upper opening rested on a bridge formed by the sutured centre of the abdominal wound and then re-entered the abdomen through the lower opening. A piece of protective gauze was applied to the surface of the bowel and the wound dressed in the ordinary way. Mr. Barrow said the chief features in which this process possessed advantages are: the ready way in which the operation is performed, the absolute security of the bowel from any liability to recede, besides which the opening provided for the escape of fæces is such that it is impossible for any fæcal matter to pass into the lower bowel after the opening is made into the colon. There are, he remarked, cases in which the bowel is so bound down on account of the disease or by a short meso-colon that the colon cannot be brought out of the wound to be fixed satisfactorily, but in this operation the bowel is freed sufficiently to allow the surgeon to bring it easily out of the abdominal opening. The easy manner with which the fæces escape enable the gut to be so perfectly purified that an operation on the lower bowel can be subsequently performed with all the advantages of an aseptic operation, and moreover in cases in which it is impossible to remove the disease there is no liability for the diseased surfaces to be irritated by the passage of fæcal matter. Mr. Barrow has found that after this operation the wearing of a belt is so satisfactory that the patients experience but very little discomfort from the artificial opening.

MIDDLESEX HOSPITAL.

Operation for Fractured Patella.—Mr. Kellock operated on a woman, æt. 35, who had been admitted for a transverse fracture of the right patella, which had taken place a few days previously. The patient was a stout, healthy-looking woman. An X-ray photograph showed that the fracture had taken place about the centre of the bone, and that there was considerable separation of the fragments. The joint was still considerably swollen, and the surrounding skin showed evidence of extravasation of blood. The patient was also the subject of extensive varicose veins in the same limb. The woman having been anæsthetised, a curved incision was made from about an inch above the upper border of the upper fragment curving inwards along the inner border of the bone and reaching to the centre of the ligamentum patellæ. The flap thus marked out was turned up towards the outer side; whilst this was being done a quantity of dark-coloured blood escaped as the joint was opened between the separated fragments. It was then found that there was a considerable quantity of blood clot in the joint and between the ends of the bones; this having been removed by swabbing, the upper and lower fragments of the bone were brought together by two wire sutures passed through the greater part of the thickness of the bone but not involving the articular surface; the wires having been drawn tight, the ends twisted and hammered into the front of the bone, and the fragments having been found to have been brought into good apposition, the V-shaped lacerations in the capsule on either side of the joint were closed with fine silk sutures, and the skin-flap then replaced and kept in position by a continuous horse-hair suture. Double cyanide gauze and mercurial wool were used as a dressing, and the limb lightly fixed to a back splint. Mr. Kellock said that the operation he had just performed was the one he considered the best in attempting to restore a fractured patella; he pointed out that, provided every care was taken, the risk of any septic trouble was little, if any, greater than in the methods of subcutaneous suture. He remarked that one generally had the opportunity in these cases of keeping the patient under observation for a few days previous to the operation, and during that time the skin could be thoroughly sterilised. The advantages of the operation were: the certainty with which all clot and tissue could be removed from between the fragments, the exactitude with which the fragments could be brought into apposition, the fact that the wire sutures could be passed in such a manner as not to enter the cavity of the joint, and the possibility of suturing the rents in the sides of the capsule. He considered that an important point in doing such an operation was to avoid the introduction into the joint of any chemical antiseptic, and he drew attention to the fact that for swabs, instruments, &c., nothing but plain sterilised water had been used. He pointed out also that the use of the back splint was merely temporary until union should have taken place in the skin wound; it would then be removed, and the patient allowed to gradually regain movement of the joint of her own accord.

The Treatment of the Insane.

The International Congress for the Improvement of the Condition of the Insane was opened at Antwerp last week, under the presidency of M. Van den Heuvel, Belgian Minister of Justice. The delegates present include representatives of most of the leading countries of Europe, as well as of China, and specialists from various parts of the world. The general feeling so far appears to be in favour of cottage settlements in preference to asylums as a means of treating insanity.

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WEDNESDAY, SEPTEMBER 10, 1902.

WORK OF THE LOCAL GOVERNMENT BOARD.

The issue of this bulky volume of 676 pages (1900-01) is an event of importance in the annals of preventive medicine. The medical officer, Mr. W. H. Power, presents the usual record of administrative work conducted by the Department during the twelve months, especially with regard to vaccination and plague. He also recounts the result of a great number of valuable auxiliary scientific investigations. It says much for the energy of this Department that time can be found for laborious researches of the kind, in spite of the enormous amount of administrative work with which it is overburdened. The scientific side of preventive medicine, as cultivated by the Board, presents the nearest approach to a national scientific endowment with which we are at present provided. It may possibly form at some future time the nucleus of a public scientific research laboratory worthy of the British Empire. Meanwhile the administrative field of public health work is wide enough to demand the energies of a strong and powerful organisation. These criticisms are made in no hostile spirit, but with a sincere wish to further the efficiency of a Department that has done more towards the development of practical hygiene than any body the world has yet known. The variety and abundance of the enquiries conducted by the Medical Department may be realised by a study of the report under notice. The official year 1900-01 will be long memorable on account of the arsenical beer-poisoning outbreak in Manchester and the neighbourhood. The discovery of the epidemic was due to the acumen of Dr. E. S. Reynolds, and the Board at once recognised the importance of the matter. One of the great functions of the Board, as everyone knows, is to conduct detailed inquiries into the sanitary condition of districts where outbreaks of disease have occurred. A typical instance of the need of such supervision is afforded in the case of Boston, in Lincolnshire, where both enteric fever and diarrhœa have prevailed to an undue extent for a prolonged period of time. The sanitary state of the town is scandalously defective. The sewage is discharged into the river Witham at a point which entails its passing in its course seawards through a large part of the town. A farmhouse affords the only infectious accommodation for a town with a population of 30,000 or 40,000 inhabitants. There is no disinfecting apparatus, the water supply is defective, and the bye-laws are out of date. The criticism of the Medical Officer seems hardly adequate when he remarks that the history of Boston set forth by his Majesty's inspector shows the disposition of certain local authorities to remain content in sanitary matters with the methods and procedures of their predecessors. In a word, the Boston Town Council is apparently concerned rather in furnishing plausible excuses for its shortcomings than in setting to work to improve the conditions of its district. The auxiliary scientific investigations cover so much ground that it is out of the question to attempt anything more than a general notice. The experiments of Drs. Klein and Houston, however, may be noticed. They deal with the behaviour of cereal products in connection with specific bacterial contaminations. This subject deserves careful investigation because of its importance with regard to bread, the non-sterilisation of which was demonstrated some years ago by two medical men. The results of the present research show that the microbes have no tendency to multiply in the mixture of cereal and bacterial culture. On the contrary, the action of the cereal was fatal in a few days to the vitality of the microbe. These experiments are reassuring so far as they go, but they appear open to some amount of fallacy which would forbid any sound general conclusion at the present stage. Dr. Klein has proved that both cockles and mussels readily take up from sea water the microbes of enteric fever and of cholera, and that they can retain in their interior these germs of disease for some days after they have been withheld from further contamination. The practical bearing of these facts is self-evident. Good work has also been done in the direction of freeing vaccine lymph from extraneous organisms. The whole Report, indeed, forms a valuable mine of suggestive information to the scientific student of public health. It is illustrated profusely with maps and photographs, whereby the text is considerably enhanced in value.

BERI-BERI.

The exact nature of this disease is still a matter of active speculation, and, though we possess certain facts as to its immediate causation and general symptomatology, these are in no way conclusive and are often apparently contradictory. Though attacks of beri-beri are often brought on by inadequate food, and especially by a continued dry farinaceous diet, and are thus occasionally met with during the long voyages of sailing ships, this only accounts for a certain percentage of the total number of cases. It must be remembered that the disease is endemic in Borneo, Java, and Sumatra, and indeed it would seem as though it had originated there, its spread to other parts of the world, in many cases, being directly traceable from this focus. For instance, beri-beri was unknown in the Guianas until the Dutch imported coolies from their eastern possessions to work the sugar estates. In the general hospital at Paramaribo, in Dutch Guiana, there are now always between twenty and thirty cases of this disease under treatment. From Dutch Guiana it has spread to the north of Brazil, and is rampant in Para, while the more southern ports are comparatively free from it. About three years ago, on a training-ship of the Brazilian Navy stationed at Para, over two hundred cases occurred, and it was only when the vessel shifted to Pernambuco that the epidemic began to abate. This was distinctly not the case of a crew deprived for a long period of fresh meat and fresh vegetables, for all that was required could be obtained from the shore. There is evidently here a causal element which is of great importance, and which has not received adequate attention. That beri-beri has some of the features of multiple neuritis is beyond doubt, but so far the bulk of the evidence is not favourable to the theory that they are one and the same disease. While beri-beri is endemic in certain places, may become epidemic under certain conditions, and is often determined by unsuitable food and lowering physical influences, these are not conditions associated with multiple neuritis. Again, there is rarely loss of sensation in the former disease, rarely visible complications in the latter. In the acute form of multiple neuritis the great danger is paralysis of the respiratory muscles, while this is only a very late contingency in the most chronic form of beri-beri. In acute beri-beri, general dropsy, with effusions into the serous cavities, hæmorrhages from the alimentary canal, a puffy, earthy, anguished face, and a fluttering pulse are symptoms which rapidly appear, and recovery is rare in severe cases. Patients affected with this disease have a tottering, jerky, dragging gait which is quite typical. Even in the less acute forms recovery is uncertain, and the patient may linger on for years helplessly paralysed. There is at present in one of the London hospitals a man who has been suffering for six years from beri-beri, and who is bedridden. He was one of three cases which occurred among some Anamites who came over to give performances in London, were herded together in a tenement in Westminster, and fed on rice, and that sparingly; one man died of the disease, the other was removed to the hospital in question, and the third recovered. Professor Uchermann, who has been for some time collecting evidence about this disease from Colonial and ship doctors and master mariners, and who has recently given the results of his investigations to the Norwegian Scientific and

Literary Society, concludes that beri-beri is the Oriental name of multiple neuritis, and is due to a toxin intoxication by tainted vegetables. Neither of these conclusions can, however, be considered definitive, but it is certain that general debility brought on by overwork and unhygienic surroundings combined with inadequate and unsound food of any description, though more especially when it is largely composed of preserves, have a determining influence in the causation of the disease. One point in Professor Uchermann's report is especially worthy of notice in this connection. He finds that it is on Norwegian ships that the disease is more often found than on those of any other nation. There is a reason for this. The regulations affecting sailing ships are in Norway and Sweden much less stringent than those, for instance, of the Board of Trade in England. The result of this is that many shipowners in England, and probably in other countries, in their greed of gain, and to escape the restrictions and expenses imposed on them, engage a certain number of Norwegians among their crews, register their ships in Norway, and fly the Norwegian flag. These ships are undermanned, the regulations for the general health and protection of the crew enforced by the Board of Trade are evaded. These ships are familiar to all who have travelled in distant parts, and constitute one of the worst features of modern mercantile enterprise. Though the vessels are not strictly speaking Norwegian, Norway and Sweden deserve the bad name which has attached itself to their shipping, for allowing their flags to cover a state of things which other countries will not tolerate. The fact that beri-beri is more prevalent on these ships than on any other, however, emphasises one point, which is that indifferent and insufficient food, with debilitating and unsanitary surroundings, are factors not unimportant in connection with this disease.

THE ABUSE OF FOOD PRESERVATIVES.

The licence which is granted to manufacturers of preserved foods in regard to the nature and quantity of the chemical preservatives which are used is not, we fear, always used to the good of the public. So long as these preservatives are of a comparatively harmless nature, the advantages accruing from their use perhaps counterbalances their disadvantages; but the case is very different when lethal drugs, such as carbolic acid and hydrofluoric acid, are used. In the curing of bacon and hams both carbolic acid and boric acid have latterly been much used. The former gives, when discreetly used, the vraisemblance of the peat smell of Irish ham. And it is urged that in the process of boiling the meat almost all the free acid is dissolved out. Boric acid, when used in the preservation of "mild-cured" hams and bacon, has a special danger. The process of boiling removes the acid and practically all the preservative agent; for the first day such meat has the mild flavour now so much relished, but the meat does not keep more than two or three days after boiling; it develops artificial ammonias, ptomaines, and other toxins. But one of the worst of the preservatives is quite a new addition to the list, fluorine. For a considerable time past the French peasant added a fluoride to the market butter, and now the custom is being adopted in this country. It will not be long before its effects are noticeable, and we write in the hope that the authorities, may take cognisance of this, the worst form of preservative that can be used. The caustic effects of nascent hydrofluoric acid on the mucous membrane of the stomach are most destructive; in children they would be rapidly fatal by arresting digestion. We are aware that hydrofluoric acid, and the fluorides of ammonium, iron, and quinine were fairly tested during the eighties in diphtheria, bronchocele, phthisis, and splenic enlargement, and although favourable accounts of them were received they are not much used to-day. There is, however, a wide difference between the medicinal use of a drug by a patient under medical observation and the daily use of the same drug in unknown quantities with our daily food. It is fortunate that hydrofluoric acid is easily recognised by its corrosive action on glass. We do not ask for the absolute prohibition of such chemicals as are not lethal and only very mildly toxic, but we do ask for a law compelling the vendor to state if his ham is cured with boric acid or phenol, or his jam kept sweet with salicylic acid, and we would like our milkman to notify the amount per quart of formic aldehyde he was supplying. All we ask is that the public be told in plain English what they are buying.

Notes on Current Topics.

Prostatectomy.

For centuries the treatment of enlarged prostate has been the opprobrium of surgery. The many methods and the many minor operations devised for its amelioration simply serve to emphasise the dread of interference with the gland that dominated the surgical mind. There was no lack of information on the anatomy of the region in the normal state, and Holmes' great work has familiarised every tyro with its abnormal state and naked eye pathology. Withal when some bold spirit suggested operation, and hinted at its removal, he heard of its vascular relations, and was reminded that the same relations once formed the subject of a great trial and killed the reputation of a great surgeon. Yet the do nothing treatment was productive neither of relief to the patient nor of credit to medicine. Brodie, in a fit of desperation, introduced his "bloody and brutal" operation; and though he succeeded in effecting the canalisation of the central lobe, others not alone failed, but by their violence tore the central lobe away, and in some instances the patient bled to death. For almost a century the bladder was considered, as far as prostatic troubles, outside the province of surgery. Numerous placebos were painted over the perinæum to promote absorption of the gland: belladonna, iodine, iodide of potassium. But the patients found no more relief from the physicians than they did from the surgeons. Once again the surgeons came forward with their suggestions, and castration, section of the cord, and a number of minor operations were tentatively tried; the capsules and the vascular relations were still the bogies that prevented the relief of the victim. This dread was all the more unaccountable because the elder Ellis had shown many years ago in Dublin that the prostatic enlargements were due to the growth of the glandular tissue, the removal of which entailed no risk of bleeding. This fact has been proven repeatedly and by none more successfully than by Goodfellow, of California, who, by following the median perineal incision of Manzoni, better known as Allarton's median lithotomy incision, has since 1896 successfully scooped out with his finger the hypertrophied glandular tissue in twenty-four cases without one untoward symptom. In not a single case was he called on to tie a vessel. Mr. P. J. Freyer's operation for the total extirpation of the prostate through a supra-pubic opening in the bladder has in his hands yielded excellent results, so that all round the immediate prospect of surgical relief in prostatic enlargement is a very hopeful one.

The Fate of the Aged Poor.

In spite of much talk and various irregular efforts, the condition of the aged poor in this country is distressing. It is time that we realised that the sick poor and the senile subject should be considered as having fallen victims to pathological processes, and consequently should be freed from the ban of pauperism. The conglomerate aspect of the average workhouse is a blot on our social system; but the road to release and adequate redress is hard to find. Miss Edith Sellers, in the current number of the *Nineteenth Century and After*, records the result of an investigation which has sought to ascertain if an old-age pension of five shillings a week to those above sixty-five years would enable them to keep outside the workhouse. In the special workhouse inspected 288 men and 437 women were found to be over sixty-five. Of these 427 were infirm, worn out, broken in health, or the subject of definite disease. Of the remaining 298 hardly one in four but was burdened with some infirmity. Of these 100 were men and 198 women, and of the women 7 were wives, 170 widows, and 21 spinsters. Of the old women 62 had no relatives, and 32 more, for practical purposes, were in the same position. Of the 198 luckless old women 96, at the least, stood alone in the world. Of the 102 who had relatives, 50 frankly confessed that their people could not or would not take them in, five shillings or no five shillings. After careful sifting, it appeared that out of all the 437 women there were only 15 who even thought they would be able to leave the workhouse were the old-age pension law to come into force. Of the 100 men only 24 declared themselves as quite alone in the world. No fewer than 90 declared that even if they had pensions they had nowhere outside the workhouse to go to. It seems that so far as the 725 senile cases investigated are concerned, the effect of an old-age pension would be practically *nil*. In the London workhouses alone at the present time there are more than 20,000 persons above sixty-five years. For the majority of these more or less medical and nursing supervision is desirable. Unfortunately, even for our sick poor adequate accommodation is often wanting, and for "worn-out" humanity our arrangements stand in need of much improvement. It is to be hoped that means will be found to solve the problem. Medical men have opportunities of studying the question in some of its practical aspects, and it may be trusted that they will take their proper part in seeking a solution.

Municipal Control of the Ice Cream Trade.

After November 1st next the Medical Officer of Health of the City of London will assume control over the manufacture of ices, ice creams, and similar commodities intended for sale. This is a reform for which we have long contended, and the example of the City of London will no doubt be promptly followed by other municipalities throughout the kingdom. In future it will be compulsory on manufacturers to notify the outbreak of any infectious disease among their *employés*, and every vendor, not himself the manufacturer, will have to place in a conspicuous place on his barrow the name and address of the persons from whom he obtains his supply, or his own should he himself be the manufacturer. The frequency of outbreaks of quasi-epidemics of gastro-enteritis distinctly traceable to the ingestion of ice creams sold in public thoroughfares, and the fact that these are for the most part prepared under conditions which violate the most elementary rules of hygiene, fully justify this departure; indeed, it is a matter for surprise that this lapsus should not long since have been remedied.

Intemperance and Infantile Mortality.

The unavoidable infantile death-rate is at present usually estimated as 100 per 1000. But the actual waste of child life in many districts is enormous. Dr. E. W. Hope, the Medical Officer of Health for Liverpool, in his recent annual report, refers to this matter. In the course of a systematic investigation of 1,082 families in which death of an infant had occurred it was found that the total number of children born in these families had been 4,574, but that 2,229 had died, practically all in infancy, thus representing a death-rate of 487 per 1,000, a waste nearly five times as great as the standard above mentioned. In twelve families in which the large total of 117 infants had been born no less than 98 perished. The circumstances of the families in which upwards of 1,000 consecutive deaths had occurred were investigated. In 21 per cent. the families were extremely and exceptionally dirty; in 18 per cent. the mothers went out to work, leaving the infant in the custody of others, frequently merely in the charge of another child; about 11 per cent. were living in homes unfit for habitation. But drunkenness seems answerable for an enormous amount of the neglect and suffering which bears so heavily on child life. In upwards of 25 per cent., and these are the cases where the mortality appears to be highest, the parents were markedly intemperate. The prospects of the life of the infant are indeed poor if the drunkenness of the mother results in starvation and neglect during her bouts of drunkenness. In many cases, also, the intoxicated state of the mother leads to accidents and serious or fatal injury to the child. But, sadder still, violence and brutality play a large part. The extreme suffering inflicted upon child life by intemperance, and the loss of life immediately resulting from it, present one of the saddest features of city squalor and seem beyond the powers of sanitation to effect a lasting reform.

Life Protection Service for Seaside Police.

THE lamentable loss of life which accompanies the annual exodus to the sea-coast is one of the dark blots on our holiday season. Much of this sacrifice is strictly avoidable, and usually arises from ignorance, recklessness, or neglect. We are strongly of opinion that sufficient means are not taken to secure adequate protection for visitors at many of our seaside resorts. It is monstrous that ambitious advertising town councils should expend vast sums of money in showing that their particular borough is the most sanitary and health-giving in the country, and yet neglect to provide proper protection to the children, invalids, and holiday makers who are attracted thither. At all seaside resorts the police should be selected for their skill and suitability in dealing with the particular class of case likely to come under their notice. In many places the law seems to exercise no particular oversight over the sand and shore, at all events a policeman is usually conspicuous by his absence. Surely the time has come when progressive watch committees could arrange to provide water police, men who, during the season, should patrol the coast line in boats, watch swimmers, guard children, be able to render adequate first-aid in needed cases, and so do something to prevent the deplorable loss of life which makes a visit to the seaside a dread to many and a disaster to some.

The Making of Mankind.

WE could wish that Mr. H. G. Wells were a member of our own profession. As a scientist Mr. Wells has gained distinction, as a novelist he has won fame and popularity, as a prophet he has sought to unmask the future, and now as a teacher and profound thinker he is attempting to mould men's minds into the acceptance of altruistic views which doubtless in many a medical man's inner consciousness has waited a suitable expression. Mr. Wells, in the current number of the *Fortnightly Review*, gives us the first instalment of his brilliant essay on "Mankind in the Making." He seeks to show that any collective human enterprise, institution, movement, party, or state is to be judged as a whole and completely, as it conduces more or less to wholesome and hopeful births, and according to the qualitative and quantitative advance due to its influence made by each generation of citizens born under its influence towards a higher and ampler standard of life. He preaches a thoughtful sermon on the serious aspect of our private lives, the general trend of all our social and co-operative undertakings, which should be directed towards the improvement of a succeeding generation, which, in turn, shall prepare still more capably for still better generations to follow. Mr. Wells is brilliant as a novelist, but as an essayist he has climbed to still higher ground. We shall watch the unfolding of his New Republicanism with sympathetic interest.

The Case of Dr. W. T. Law.

THE fund which has been raised, on the initiative of Dr. Paramore, towards the law expenses incurred by Dr. W. T. Law in the recent action which he successfully defended, was handed over to Dr. Law at a meeting held for that purpose under the presidency of Sir William S. Church. The chairman expressed the pleasure he felt at being enabled to offer Dr. Law a mark of the sympathy of the profession in the unpleasant circumstances in which he found himself through no fault of his own, and he insisted on the duty of practitioners to ensure against contingencies of the kind by joining a medical defence society. Dr. Paramore alluded to the brilliant pecuniary achievement represented by the sum of £700, which he claimed was also a grand moral victory. Dr. Law, in acknowledging the presentation, thanked the members of the profession and others who had so generously given him their moral and pecuniary assistance under very trying circumstances, and especially to Dr. Paramore, who had been indefatigable in his efforts. The meeting concluded with a vote of thanks to the proprietors of the Holborn Restaurant for the generous loan of the room for the second time without payment, and this was carried by acclamation.

The Statistics of Longevity.

THE average age at death under existing conditions is forty-four years and nine months, taking males and females together. On analysing the returns, however, we find that women live some three years longer than men, a fact which is easily explained when one reflects upon the greater mortality among male infants and on the greater exposure of men to atmospheric and traumatic vicissitudes, to say nothing of the greater mental wear and tear to which they are subjected. The most satisfactory feature of these statistics, we are told, is the evidence which they afford of the gradually-increasing longevity of the human race. The gain in the average duration of life at the end of last century, as compared with the beginning, amounts apparently to no less than thirteen years, and the process of "prolongevity" is still going on—that, at least, is the first conclusion arrived at from the study of vital statistics. But another explanation is forthcoming of the rising average of the age of death, viz., a decreasing natality. The principal factor in reducing the average duration of life is, of course, the relatively considerable mortality among the young; consequently the smaller the number of children comprised in a given population the higher will be the average age at death. Now, a decreasing natality is a progressively marked feature of all civilised communities, and as this becomes more and more marked in years to come there will, of course, be a corresponding reduction in infantile mortality and a generally higher age at death of the population as a whole. Pushing the argument to its logical conclusion, when there are no more children the mortality will progressively diminish until, when the then generation has passed away, there will be no mortality at all. Statistics evidently require to be handled with discrimination, for they do not always, on close scrutiny, bear out the deductions one is tempted to make.

The Forthcoming Election to the General Medical Council.

It seems that when, as will shortly happen, the term of office of Sir Victor Horsley as member of the General Medical Council comes to an end, there will be a contested election, Mr. Joseph Smith, of Chiswick, having announced his intention of presenting himself as a candidate. Eligible as Mr. Smith would be under any other circumstances, we cannot but think that his appearance on this occasion is ill-timed and even injudicious in view of the immense services which the retiring member has rendered to the profession and also to the Council itself. Sir Victor Horsley has attained a position and an influence on the Council as a direct representative which no one else could reasonably expect to achieve for years to come. It needs an incisive eloquence such as his to fight the battle of the general practitioner against the opposition of purely corporate interests, and his efforts have met with such general approbation and appreciation that we have no doubt as to the issue of the contest, if contest there should be. Sir Victor Horsley has shown that he can rise superior to mere vested interests, and the reforms which he has initiated are still in large measure incomplete. It may be that on reconsideration Mr. Smith will recognise that there are places on the Council which, when they become vacant, he may with more justice aspire to fill than the one to be thrown open on this occasion.

The Teaching of Hygiene in Schools.

If we wish to educate the people in the principles of hygiene no better opportunity of doing so can be found than that afforded by the instruction of school children. The importance of cleanliness of the person, of food and drink, and of the air which we breathe, can be demonstrated in ways which cannot fail to excite the interest and impress the memory of the young. The benefits to be derived from an ample provision of fresh air and the means of obtaining it are peculiarly suitable subjects for object-lessons in practical hygiene. An excellent aid to instruction in this subject is provided by the large diagram which Messrs. Boyle have published illustrating the laws which govern the movement of air and the means by which a supply of fresh air can be secured by employing the powerful natural forces which are ever ready to our hands. This is "the gospel of fresh air" to which the public have been rendered alive in association with the crusade against tuberculosis. This diagram deserves a place on the walls of every school, not only elementary, but even in the higher grades, since the principles involved are such as should be kept prominently before the young at every stage of their career.

Reciprocity of American Medical Diplomas.

The movement in favour of reciprocity of recognition among State medical diplomas in the United States is gaining ground, Illinois taking the lead. It is obviously absurd, in a country like the great republic that university degrees and college diplomas should only be accorded credit within the limits of the State which gives them birth. On the other hand, some States have been, and, for the matter of that, still are, deplorably lax in their maintenance of a standard of professional acquirements, and one can understand that their diplomates should be regarded elsewhere as "undesirables." One advantage of reciprocity will be that the low-standard licensing bodies will have to raise their requirements if their diplomates are to be recognised as fit to practise medicine in other States. Ultimately, no doubt, by a process of evolution, the various universities and medical colleges will be asked to assist in the formation of a general board of medical education, the function of such board being to establish and enforce a minimum standard of excellence as a condition of recognition. The process of evolution so far has been a slow one, but the citizens of the United States are eminently practical men, likely to carry through a reform of this kind in vastly less time than would be required in the hide-bound countries of the Eastern hemisphere.

Pellagrous Affections of the Skin.

Mr. U. Ray, Assistant Surgeon, Uluheria, India, reports that this rather mysterious cutaneous affection was first noticed by him in Saran, in 1900, when he met, in the outdoor dispensary room, some patients who were "troubled with a burning of the skin in the hands and feet and the appearance of a red rash on the skin." He was told that the red spots had been at first painful. They presented a "tense feel" to the touch; and, as this subsided, the skin remained rough and dry. There was a frequent accompaniment of some symptoms of digestive derangement—such as diarrhœa. The tongue was usually red, and "dryish." There was no symptom present which could be referred to central nervous derangement, unless the local cutaneous hyperæsthesia ould be suspected as such. In the early stages of the affection, the cutaneous lesions were disposed to come and go at intervals; but, as time passed, these remained and "became fixed." No granulomatous or nodular growths, suggestive of contamination by leprosy, were detected in any of these cases.

"Paratyphoid" Fever.

There are few groups of organisms more puzzling to the bacteriologist who attempts to distinguish species by rigid lines of demarcation, than the *Bacillus coli* group. By far the most important of these allied species is, of course, the typhoid bacillus, and the tests for its identification from very similar organisms are as numerous as they are uncertain. Of these, the most scientific is the Widal reaction to the genuine typhoid blood, and, taking this as the *sine qua non* of the typhoid bacillus, it has recently been pointed out that there are certain other fevers closely resembling typhoid in their clinical appearances, but caused by a different organism. Several observers have described in particular a disease called variously "paratyphoid" and "paracolon." The temperature chart is typically that of a mild case of typhoid, but crisis is comparatively more common, and death is rare. Pathologically, in the cases examined post mortem, there were no local lesions in the intestine, nor was the spleen enlarged. A rose-colour rash, as in typhoid, is often seen. The Widal reaction is always absent, and a definite bacillus, resembling, but differing from, typhoid, has been isolated from the blood. The disease is somewhat rare, but is probably nearly always confounded with typhoid. The persistent absence of the Widal reaction in supposed cases of the latter should lead physicians to think of this allied disorder.

Anti-Typhoid Inoculation.

The article by Professor Wright, of Netley, published in the current number of the *Lancet*, contains a statistical synopsis of five years' experience of anti-typhoid inoculations in South Africa, India, Egypt, and in the United Kingdom. Speaking generally, the figures appear to show that inoculation confers a distinct measure of protection, both in respect of the lessened incidence of typhoid fever among the inoculated and the lessened case mortality among the inoculated who subsequently contracted the disease. The paper constitutes a valuable addition to our knowledge of this protective measure, but the author is the first to point out that much remains to be done before anti-typhoid inoculation can be expected to afford uniform results.

Intra-Spinal Cocainisation.

When the use of cocaine for extensive anæsthetisation by intra-spinal injection was first introduced it was thought that it would in a very short time drive out of the field the use of general anæsthetics for operation in the lower limbs. As time has passed, however, several limitations have been laid down to its employment, and its risks seem in great measure to counterbalance whatever advantages it may possess over general anæsthetisation. In addition to its positive risks, it has also the disadvantage of not always producing the desired result. For instance, in a case recently reported (*Charlotte Medical Journal*, July, 1902) by Dr. Tucker, of Raleigh, although intra-spinal injection of cocaine was practised on three occasions, in order to amputate the left leg, no anæsthesia was effected on that side, whilst complete anæsthesia of the right limb was obtained. This result held whether the injection was given on the right or left side of the canal.

The Ontario Medical Council.

The General Medical Council is a body which usually comes in for considerably more blame than praise, and those who think that its work might be much better done than at present watch with interest the proceedings of similar bodies in other countries. In such a spirit, we turned to peruse the report of the last session of the Ontario Medical Council, and we certainly found that things are done otherwise in Canada than at home. The most noticeable points about the proceedings are the vigour and freedom of debate, which far surpass anything we are accustomed to in these countries, outside the privilege of Westminster. One member casually refers to a certain statement of another as an "infernal lie," while the same gentleman is described by a third as "a wasp in the tent at a garden-party, and a festive *skeeter*." The latter term is quite beyond our knowledge. Perhaps we should be glad that our Medical Council is not yet a garden-party of this kind, with or without wasps.

Whooping-Cough in Public Conveyances.

A correspondent, whose letter we publish elsewhere, calls attention to a singular lapsus in our sanitary administration. It is a matter of daily experience that careless or ignorant parents convey children obviously suffering from whooping-cough in public conveyances. It is unnecessary to insist upon the extreme infectiousness of this troublesome and, in the aggregate, fatal malady, and it is strange that no steps are taken either to prohibit the practice or even to direct the attention of parents to the impropriety thereof. There is a law against the conveyance of patients suffering from infectious complaints in public conveyances, but in practice this is only held to apply to disease scheduled under the Compulsory Notification of Diseases Act as infectious. Now that the lapsus has been pointed out, it is to be hoped that the authorities will take steps to prohibit, or at any rate to disadvise, the practice.

Government and the Anti-Plague Serum.

The decision of the Indian Government to withdraw its subsidy towards the cost of the preparation of Lustig's serum in Bombay has given rise to adverse comment throughout India. The Bombay Medical Mission have lately held an important meeting in reference thereto, to decide whether the profession should take any steps, and if so what, in order that further investigation in the serum-therapy of plague should be continued. In the debate which took place, and occupied three days, the matter was thoroughly thrashed out, and very varying opinions were aired. On the whole, however, while far from being quite established, the case for Lustig's serum as a useful means of treatment is strong, and no harm can possibly come from thorough investigation. A resolution was unanimously adopted to the effect that some arrangement should be made whereby research work in connection with serum-therapy in Bombay might be continued, leaving the matter open as to the exact value to be attached to Lustig's serum. It is to be hoped that the authorities will pay due attention to the mature opinion of the profession of Bombay.

The Night Staff of a Workhouse Infirmary.

The understaffing of workhouse infirmaries is from time to time demonstrated to a wondering public through the agency of the Coroner's Court. Last week an incident of the kind focussed popular attention for the moment on the scandalously inadequate nature of the night-nursing arrangements at the Lambeth Workhouse Infirmary. An inmate was found in a lavatory with his throat cut, and the jury who inquired into the affair returned a verdict of suicide while of unsound mind, and added a rider to the effect that the wards were not properly supervised at night. The facts upon which the rider was based were as follows: The night nurse had to look after two infirm wards and a sick ward, in all a hundred patients, while she had also to look after anyone who might be taken ill in the body of the workhouse, which comprised 700 more inmates. There was also a night sister who went round the house every two or three hours. It is to be presumed that the Government inspectors of the Local Government Board are aware of this disgraceful state of affairs. The scandal of inadequate nursing is growing beyond all bounds in these latter days of humaner Poor-law administration. The Lambeth Guardians seem destined to come into notoriety on the score of their workhouse management.

The Scientific Aspects of the Bacon-Shakespeare Controversy.

It is amusing to see the scientific allusions in Shakespeare's works dragged in for the purpose of bolstering up the hypothesis of the works in question having been written by Bacon. More amusing still is the fact that the "summary of evidence," in which this aspect of the question is argued, is from the pen of a judge—Judge Webb, of Dublin, an ex-Fellow of Trinity College. His Honour is evidently possessed of considerable ingenuity, but his knowledge of early science does not appear to be on a par with his controversial aptitudes. An able criticism on the judge's contribution to the debate appeared in the last number of the *Westminster Review* from the pen of Dr. John Knott, whose scholarship and scientific attainments give him an almost unfair advantage over the subject of his destructive criticisms. Dr. Knott kicks the ground from beneath the Judge's feet by showing conclusively that Bacon was not a man of science at all, and that his scraps of scientific knowledge were derived from sources accessible to every student of that date. Dr. Knott points out *inter alia* that William Harvey, the discoverer of the circulation of the blood, was Bacon's medical adviser, and that his views thereon were contemptuously rejected by "Bacon, the scientist." It is, indeed, odd that Bacon, who so dogmatically laid down the general lines on which scientific research should be conducted, displayed throughout an incredulous and unsympathetic spirit towards results obtained by the method of direct observation of which he made himself the champion. We commend the *Westminster Review* article to our readers, not exclusively those who take an interest in the controversy, but all who can appreciate a scholarly attack on an untenable position.

"Unknown" Patients at Public Hospitals

A recent occurrence at a London hospital has brought before the public the desirability of some system with regard to the identification of patients brought to a hospital in an unconscious condition. In the particular case in question a child was brought to the Great Northern Hospital in a van by two men, who stated that they had run over the child by accident. The hospital authorities did not take the names of the men, and the child remained five days in the wards, when it was decided to send him to the workhouse infirmary as an "unclaimed"; but the mother had meantime learned of the whereabouts of her child, and took him away. The boy died subsequently, and the Coroner very properly pointed out that the names of the men should have been taken, as it was possible that the death might have resulted from criminal negligence. It is to be feared that a similar laxity prevails in many of the medical charitable institutions of the metropolis. Matters of the kind are left to the police on the ground that the duties of a hospital are purely medical and surgical. It seems clear, however, that the safety of the public demands the immediate introduction of a business-like system of registration of all details connected with the admission of unconscious patients. A matter of this kind might well be considered by the King Edward's Hospital Fund.

The Mosquito and Yellow Fever.

The Liverpool School of Tropical Medicine has won its spurs at an unusually early period of its existence. Already their annals have been hallowed by the name of a martyr to science in the person of Dr. Myers, who contracted yellow fever and died in the recent expedition to Para. His colleague, Dr. Durham, was also attacked by the malady in question, but happily recovered, and has since published an account of the scientific results of the investigation. Briefly stated, his conclusions are that the disease is due to a small bacillus, and that infection is generally caused by the bite of a brown night-biting gnat (*Culex fatigans*), which inoculates the victim with bacilli obtained from yellow fever patients whom it has previously bitten, or from the surroundings of such patients. This report registers a great advance in our knowledge of this deadly tropical disease, although the first steps in the unravelling of the mystery were undoubtedly due to local investigators. There is every prospect that with the present grasp of facts pertinent to the origin of yellow fever its extinction will sooner or later be a necessary consequence. As in many other specific infections, the hope of mankind must depend upon prevention rather than upon cure. The mosquito appears to be a most deadly foe of mankind, and there is no particular reason why the scientific warfare should not prevail against the mosquito, seeing that men of science have already routed armies of the infinitely smaller specific bacteria.

Radical Cure of Hydrocele.

FROM a large experience of the value of two or three drop injections of pure phenol into an emptied tunica vaginalis testis, Drs. Coley and Satterwhaite have been so pleased with the results they obtained that they recommend the use of phenol in small doses for the radical cure of hydrocele. Their procedure consists in the use of a double trocar and cannula, the inner trocar tightly fitting and projecting slightly beyond the outer and bearing a thread at its proximal end, so that it can be attached to any ordinary hypodermic syringe. The inner cannula, being attached to the syringe, is first filled with liquid phenol, and two or three drops injected. Such a small quantity of phenol could not affect the whole of the surface of even a moderate-sized sac, but the sac of a hydrocele is never completely emptied by tapping, and the remaining fluid is quite sufficient, with the added phenol, to excite the necessary adhesive inflammation over the lining membrane of the tunic. The use of pure phenol in this disease is not new, but in the past it fell into disrepute from the untoward results that followed from its use in excessive quantities. But to the authors we are indebted for demonstrating its utility and safety in small doses.

PERSONAL.

SURGEON-CAPTAIN T. J. CREAN, V.C., late of the Imperial Light Horse, has been gazetted as captain in the Royal Army Medical Corps.

AMONG the latest contributions to King Edward's Hospital fund for London is the sum of £105, being the annual subscription of his Majesty the King, founder and patron of the fund.

DR. J. T. C. NASH, Medical Officer of Health of Southend-on-Sea, has been awarded a sum of 125 guineas in recognition of his services in connection with small-pox in that town.

DR. JOHN BURNS, of Glasgow, Vice-President and "Father" of the Faculty of Physicians and Surgeons, has just entered upon his eighty-eighth year, and is still engaged in active consulting practice.

MR. ALFRED WILLETT is to be entertained at dinner by his past house surgeons on the 30th inst., on the occasion of his retirement from the post of surgeon to St. Bartholomew's Hospital, when a presentation will be made to him.

MR. JOSEPH SMITH, M.R.C.S., D.P.H.Camb., of Chiswick, late President of the Incorporated Medical Practitioners' Association, and President of the Society of Members of the Royal College of Surgeons of England, has come forward as a candidate for the seat on the General Medical Council which will shortly become vacant on the expiration of Sir Victor Horsley's term of office.

DR. SCHWENINGER, who attended Prince Bismarck until his death, has been appointed Professor of the History of Medicine at the University of Berlin. According to the New York *Medical Record* Dr. Schweninger was originally given the post of Extraordinary Professor by Bismarck as a mark of gratitude for his success in reducing the Prince's corpulence, and his transfer from the Skin Department to that of Medical History, in which he is not known even to have taken any interest, is sharply criticised.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

BELFAST.

[FROM OUR OWN CORRESPONDENT.]

As a result of a fall of rain in Belfast on Tuesday night and Wednesday morning, the 2nd and 3rd September, the city was flooded in an extraordinary manner on Wednesday, miles of the principal streets being under water and business practically at a standstill. The floods of water having subsided, a flood of correspondence has followed, and so strong does feeling run that the Lord Mayor has been requisitioned by a number of members of the City Council to hold a special meeting of Council to consider what steps can be taken to avert similar disasters in future. The ' man in the street " attributes these floods—this is the second within a year—to the failure of the main drainage system, while the City authorities piously say they are due to "the act of God," and that no drainage system can be expected to cope with a rainfall of about 2¼ inches in twenty-four hours. Meantime, the daily papers have printed alarming statements of some local medical men regarding the probability of an epidemic of typhoid being caused by the sewage deposited in and under the floors of the houses in the flooded districts.

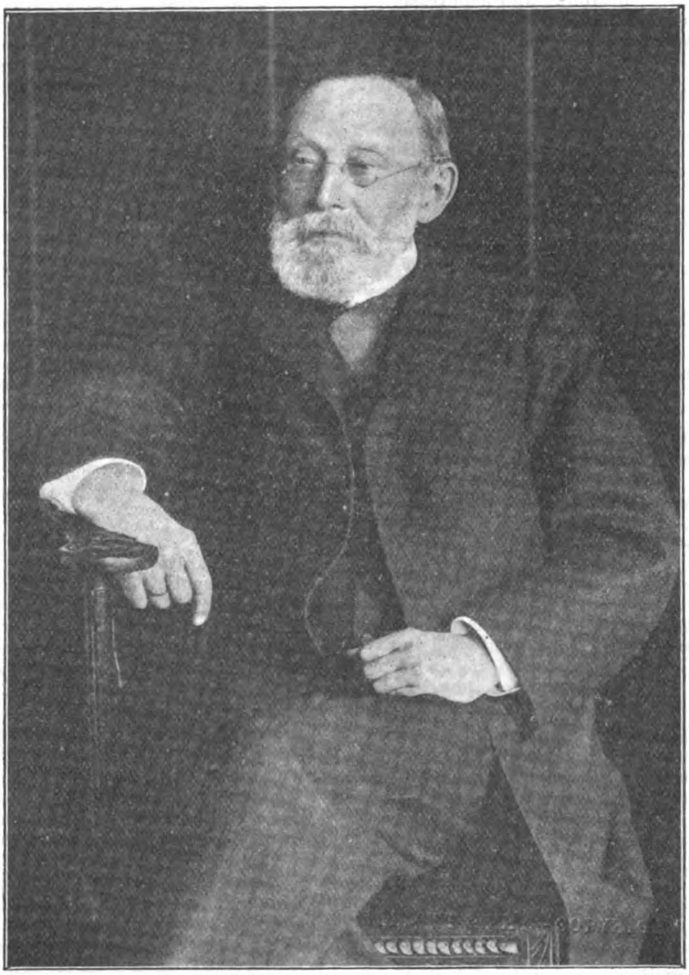
The Belfast Workhouse Supply Scandal, as it is now called, is still before the public. Dr. Smyth's Local Government Board Report was discussed at a meeting of the Guardians on Friday, 5th, but their discretion being greater than their courage, they held the meeting in private. It is stated in the daily Press that Messrs. John Clarke and Co., the contractors to the Board for medicines, &c., repudiate any liability in connection with the matter, but are prepared to indemnify the guardians against any surcharge which may be made as a result of the inquiry. As the *Northern Whig* remarks,] "This is an act so significant that there is no need to comment upon it."

Obituary.

PROFESSOR RUDOLF VIRCHOW.

The unfavourable news of the last few days concerning the critical condition of Professor Virchow were confirmed by his death early on the morning of Friday last. He never really recovered from the injury he received in January last when he sustained a fracture of the neck of the femur, an accident which in persons of advanced years so frequently determines a fatal result. In spite of the reassuring bulletins which were issued up to about a month ago, those in close contact with the illustrious professor were painfully cognisant of his critical plight. While at Harzburg, whither he had been removed in the hope of expediting convalescence, serious symptoms of heart failure made their appearance, and the gravest doubts were felt as to the possibility of conveying him back to Berlin. The journey, however, was safely accomplished on the Saturday preceding his death, but the symptoms of collapse became very pronounced, and he passed away at 2 p.m. on the 5th inst., in the 81st year of his age.

Virchow was a many-sided man. His genius illuminated whatever subject he took in hand, but the Virchow we mourn is the pathologist, the man of science, who for many years led the van of contemporaneous thought, the man who first proclaimed that the processes of disease are merely physiological processes under a different aspect; in other words, merely a form of reaction. He it was who forged the key which has opened the door to the scientific study of disease, furnishing an intelligible hypothesis since confirmed by multiple painstaking investigation.



PROFESSOR VIRCHOW.

From Photograph by Messrs. Elliot and Fry. Copyright.

Virchow was born in 1821, in a small town not far from Stettin, in Pomerania. He took a degree in medicine in 1843, and in 1847 became external lecturer in pathology at the University of Berlin. Soon after he, in conjunction with Renhardt, founded the *Archiv fur Pathologische Anatomie und Physiologie*, which he continued to direct throughout his long and busy career. This scientific periodical forms the storehouse of original research and observation for the last half-century. At this early period of his career Virchow was deputed to report on a severe outbreak of typhus fever in Silesia, and his report, couched in vigorous terms, created a great impression, advocating as it did reforms which, at the time, were judged little short of revolutionary. The influence of this painful experience on Virchow himself was very marked, for he forthwith threw himself into the vortex of politics, and with such zest that he startled his colleagues in the University and was constrained to resign his post.

He was, however, already noted as a man possessed of great scientific acumen, and as an indefatigable worker, and he was forthwith offered the chair of pathology at Würzburg, whither he emigrated. He once more gave himself up wholly to science, which he pursued with the ardour and assiduity which were his lifelong characteristics. The outcome of several years' close study was the famous "Cellular Pathology," published in 1856, which very soon captivated the minds of his scientific contemporaries. As is the case with all epoch-marking departures in science, Virchow's theory of cellular pathology was founded on the work of others, but it needed Virchow's broad grasp and masterly command of details to co-ordinate these views into an organic whole. It is not enough to proclaim a truth—to command acceptance it must be shown to be a truth, facts have to be marshalled, criticisms have to be refuted, and the harmony of the conception has to be demonstrated. Virchow showed that the cell is the unit of life in morbid, as well as in healthy, conditions, and that every cell originates directly from a pre-existing cell. It follows that even the most abnormal structures are derived from normal cells which have undergone abnormal development in response to the irritation caused by injurious influences.

This work at once placed Virchow in a commanding position, a fact which was recognised at Berlin, where he was offered the important post of Professor of Pathology. Students thronged his lecture-room, and his fame spread far and wide. A little later Virchow was elected on the Municipal Council of Berlin, where his remarkable powers of organisation and his technical knowledge ensured him a wide sphere of activity. In 1862 he was elected to the Prussian Chamber, and threw himself into parliamentary life with the ardour and elasticity of a young man, though then over forty years of age. He was a clever speaker, and under the empire of strong opinions his language was apt to be violent. He said what he thought, and said it with emphasis. He retired from active political life in 1878, although in 1880 he became a member of the Reichstag. Professor Virchow visited London several times, the last time in 1898, when he delivered the Huxley Lecture at Charing Cross Medical School on "Recent Advances in Physiology." The completion of his eightieth year last autumn called forth a world-wide demonstration of respect, still fresh in the memories of our readers.

In addition to the "Cellular Pathology," Professor Virchow's contributions to science comprise "Morbid Tumours," "Collection of Treatises on Scientific Medicine," "Collection of Treatises on Public Medicine and Epidemiology," "Goethe as a Naturalist," "Four Lectures on Life and Illness," "The Education of Women," "The Function of Science in the New National Life of Germany," "Free Knowledge in the Modern State," "The Necropolis of Koban in the Caucasus," and "Alimentation and Well-being."

The illustrious professor was one of the most modest and retiring of men, "full of his subject and nothing of himself." Unassuming and affable, he was idolised by those who came under the charm of his manner. "Replete with knowledge, profound and penetrating in thought, plain in utterance, the embodiment of accurate information and sound judgment, the true servant of truth."

The Berlin Town Council decided to organise a public funeral, which was to take place yesterday (Tuesday), and funeral orations are announced to be delivered by Professor Waldayer, of Berlin, Dr. Kirschner, Burgomaster of Berlin, and others.

DR. AVELING, LONDON.

WE regret to learn that Dr. Aveling, of Stamford Hill, met with his death at Mullion (Cornwall), a few days since while attempting to render assistance to a drowning lady, death being due, it is surmised, to syncope. Dr. Aveling had cycled from Mullion to Helston and back, and had then gone for a bathe. The deceased gentleman belonged to a distinguished family, and was M.D. of London and a Fellow of the Royal College of Surgeons of England, &c. Though possessed of singular talent and of general knowledge far beyond the ordinary, Dr. Aveling spread his talents over too wide a field, and as a matter of fact lacked the power of concentration, but for which he would unquestionably have left a name in science.

Literary Notes and Gossip.

AMONG new periodical literature we notice *American Gynecology*, a new monthly journal published in New York; and *Zeitschrift fur allgemeine Physiologie*, a new journal devoted to the exposition of physiological subjects.

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A NEW edition of Dr. Sydney Stephenson's "Ophthalmic Nursing" will shortly be issued by The Scientific Press. This useful work may very advantageously be studied by nurses and dressers who are about to enter the ophthalmic service of a hospital.

⁂

THE Rev. J. E. Kempe, a veteran of ninety-three, has just published, as "The Recollections of a Director," many records of the time when, as deputy-chairman of the Clerical, Medical, and General Life Assurance Society, he came in contact with such lights of the profession as Sir William Bownan, Sir Benjamin Brodie, Dr. Farre, Sir James Paget, Sir Geo. Burrows, Sir W. O. Priestley, and Sir Andrew Clark. Many of the recollections will be of peculiar interest to medical men.

⁂

FOR many years the "Nouvelle Iconographie de la Salpêtrière" has afforded valuable reproductions of many old paintings and interesting drawings illustrating features of medical practice or demonstrations of surgical skill. Dr. Paul Richter has recently published an attractive work on this subject, "L'Art et la Médecine." Anyone at all acquainted with the treasures of British art galleries will at once recall many well-known pictures which have gained their inspiration from medical and surgical science, and we venture to think that in the collection of such portrayals of the healing art, a labour of love might be afforded to any of our readers blessed with artistic taste and—much time.

⁂

"THE Case for Vaccination," by E Brown, M.R.C.S., L.R.C.P. (Baillière, Tindall & Cox), is an *exposé* of the history and principal statistics of vaccination, drawn up in a form suited for the education of the public, special attention being drawn to the control obtainable over small-pox in contrast with the comparative inefficacity of prophylactic measures in respect of other common infective diseases. The case is cogently stated and the reasons given which induce medical men to uphold the practice. This little book, of less than fifty pages, ought to find a place in every village library and every free library throughout the kingdom.

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THE first thing that arrests the attention of the reader of the new volume of the *Edinburgh Medical Journal*, now before us, is the beauty of its illustrations. Plates XI. and XII., opposite pages 552 and 556, are works of art, immeasurably superior to any illustrations that we have ever seen in a medical work. Coming to the letterpress, we find a series of original articles, the great majority of which are on practical subjects by men who have already made their name in the medical world. With these we have a series of reports on the recent advances in medical science, dealing with medicine, surgery, obstetrics, gynæcology, therapeutics, &c. We congratulate the editors on this excellent volume.

⁂

WE have received a copy of the "Supplement to the Royal University Calendar" for this year, containing copies of the examination papers for the different faculties of arts and professional subjects. In medicine the papers set range from very easy to immeasurably difficult. Some examiners seem to think that their speciality is to be the life-work of the candidate. It should be borne in mind that the candidate is probably qualifying for a dispensary practice or one of the Services. It is very desirable that we should have specialists who devote their whole time to their particular branch of medical science; but to ask more than an elementary knowledge of some of the specialities from a medical student, considering the many subjects he must know something of, is wrong.

⁂

THE preparatory essay to the twenty-seventh volume of the "Encyclopædia Britannica," on "The Influence of Modern Research on the Scope of World-History," is from the pen of Dr. Henry Smith Williams, former lecturer in the Hartford School of Sociology, U.S.A. The essay occupies twenty pages of quarto, and deals with such discoveries as have led to broad historic generalisations, regarding such subjects as the Antiquity of Man, the Antiquity of Culture, the Chronology of Ancient History, the Status of Bible History, the Origin and Development of the Art of Writing, and the Evolution of the Fine Arts. It is one of the most interesting of the many contributions with which American physicians have recently enriched general literature.

⁂

AN article by Mr. Morton in a recent number of the *Journal of the American Medical Association* gives, in concluding, an excellent summary of the data which, up to the present, have been furnished by observation and experiment on the X-ray treatment of malignant growths. The net results hitherto arrived at are as follows:—(1) Relief from excruciating pain and constant suffering, often immediately; (2) reduction in the size of the new growth; (3) establishment of the process of repair; (4) removal of the odour, if present; (5) cessation of the discharge; (6) softening and disappearance of lymphatic nodes; (7) disappearance even of lymphatic enlargements not directly submitted to treatment, and often at some distance; (8) removal of the cachectic colour and appearance of the skin; (9) improvement in the general health; (10) cure, up to date, of a certain number of malignant growths.

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To the subscribers to the annual volume of "St. Thomas's Hospital Reports" it is unnecessary to say anything of the wealth of information that it contains. The statistics of 5,261 cases cannot be uninteresting, particularly as they were one and all serious as shown by the death-rate, which was 10·49. An "In Memoriam" notice of the late Dr. Cory, though a little late in appearance, is very welcome and well deserved. It contains the pleasing information that Dr. Cory's widow has been granted a pension, a recognition of the heroic self-sacrifice of her husband on the altar of science. We would like to see these valuable Reports better known and more read; their analyses and summaries of cases are just such information as the physician and surgeon seek: practical and trustworthy.

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Vol. X. of *The Scottish Medical and Surgical Journal* is on our table (January to June, 1902). It offers 581 pages to the curiosity of the inquiring reader, many of which contain a large proportion of interesting and valuable information. Among the articles which transgress, very instructively, the every-day boundaries of British professional routine we may mention the description of "'Latah' among South African Natives," contributed by Andrew Gilmour, M.B.; and "Extracts from the Talmud and from Celsus, illustrative of the State of Gynæcological Medical Science at the Beginning of the Christian Era," by Dr. H. M. Church. The latter forms a valuable supplement to the interesting and erudite "History of Ancient Gynæcology," produced in Australia by Dr. McKay, and recently published by Messrs. Baillière, Tindall, and Cox.

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A small, but very instructive, booklet, bearing title "Les Oxydations de l'Organisme," has just been issued by Messrs. Ballière et Fils, of Paris. The authors, Drs. E. Enriquez and J. A. Licard, deal very lucidly and instructively with the recently discovered soluble ferments, which have been baptised by Duclaux with the generic appellation of *oxydases*. The field is still a vast prairie level, in which few landmarks have been firmly erected, and the overhanging firmament is not yet sufficiently luminous to enable us to focus, to our mental satisfaction, many of the local areas which the pioneers in this department have been attempting to bring under geometrical limitation and reproductive cultivation. But that there is a recuperative future before them we have little doubt; and whatever the ultimate verdict of the scientific world may prove to be, we consider that the matter and methods of their present exploration are worthy of the best attention of our professional brethren.

⁂

"Passages in the History of York Lunatic Asylum" is the title of a pamphlet comprising about eighty pages published by Mr. Charles G. Milnes-Gaskell, Chairman of the West Riding County Council. Mr. Gaskell has culled much interesting information regarding the early history of this asylum and the treatment of the insane a hundred years ago, although some may be inclined to question the justification of again bringing under public notice many degrading incidents that occurred here and elsewhere in those days. The author vindicates himself by setting forth that the influence of the early history of this hospital cannot be overrated in any account of the treatment of lunacy, and further quotes the opinion of Dr. Hack Tuke that they should be "remembered for ever as the only means of preventing their recurrence." York led the way in the beneficent reform movement, and Mr. Gaskell well deserves the gratitude of his fellow-Yorkshiremen for this interesting account of the boons won by their forefathers at the cost of much suffering and self-sacrifice.

⁂

"Protoplasm: its Origin, Varieties, and Functions," is the title of a very small volume by John W. Hayward, M.D., author of several works on medicine, sanitation, house-building and hospital construction, &c., published by Messrs. John Wright and Co., Bristol. The domain of inquiry which the writer has undertaken to elucidate in a small space is a very wide one indeed, and, as our readers—at least, those of experience—will at once surmise, the surface of the soil is but skimmed, and nowhere does the author make appreciable progress towards plucking out the heart of the mystery of organic life. Towards the end of this booklet we are informed that the grey matter of the frontal lobe of the brain is "the most highly developed protoplasm there is. It must be of an exceptionally fine quality in such brains as those of Messrs. Chamberlain and Asquith; perhaps a little less fine but more in quantity in such as those of Lord Rosebery and the late W. E. Gladstone." Dr. Hayward appears to think the *political* intellect the most "highly developed" of all. We can assure him that all members of his profession do not think so.

⁂

Books on the subject of vaccination are particularly welcome just now, and it behoves every practitioner to fortify his memory with statistics in order that he may be enabled to influence public opinion within his particular sphere in favour of more complete protection against small-pox, a disease which is always lying in wait for the unprotected or the imperfectly protected. Dr. E. J. Edwardes' "Concise History of Small-pox and Vaccination in Europe" (H. K. Lewis) supplies in a handy form the chief official statistics of Europe, and the author proceeds to urge the imperative necessity of confiding the enforcement of the Vaccination Laws to a central authority in place of the guardians, who are elected for purposes altogether foreign to the public health. The little work contains an interesting *résumé* of the history of small-pox, inoculation, and vaccination down to the Report of the Royal Commission, followed by "the great surrender." In less than 150 pages the author publishes statistically irrefragable evidence of the immense protective influence of vaccination throughout Europe. A knowledge of this important subject might well be exacted of all aspirant practitioners, but since that is not so, the omission may be remedied by voluntary effort.

Literature.

FREYER ON STRICTURE OF THE URETHRA. (*a*)

Mr. Freyer, who is so well known in this department of surgery, states that the subject contained in this volume consists of a series of lectures delivered at the Medical Graduates' College and Polyclinic. There is no class of maladies to which man is subject that causes more misery and pain than stricture of the urethra and enlarged prostate. It is therefore very convenient to take up a small and readable volume in which one can obtain at a glance a clear, concise and practical *resume* of the most recent knowledge of the subject and the methods of treatment recommended, which Mr. Freyer states he has found from personal experience to be sound and effective. Stricture of the urethra is the bane of the many in young and adult life, while enlarged prostate more or less affects every man after the age of sixty. The various points regarding stricture of the urethra together with the management of complicated cases with the various treatments recommended from time to time are clearly and concisely given.

But the last chapter on the "Total Extirpation of the Prostate in its Capsule" is the most interesting of all. On reading such a statement for the first time it is rather startling owing to our old and preconceived ideas concerning the dangers of meddling with such an organ. However, it is wonderful to observe the enormous advances that have taken place in surgical procedure in the last twenty-five years. As regards this radical operation Mr. Freyer says in his lecture, "I think I shall not be accused of exaggeration when I state that all previous so-called methods of radical cure of enlarged prostate are unsatisfactory, and that catheterism, though the least objectionable mode of treatment in the vast majority of cases, is liable sooner or later to terminate in cystitis or other dangerous complication. I submit that the results obtained in these cases of total extirpation of the enlarged prostate encourage us in the hope that we have at last arrived at a rational method of dealing with this painful and frequently fatal malady."

The reviewer of this volume was present at St. Peter's

(*a*) "Clinical Lectures on Stricture of the Urethra and Enlarged Prostate." By P. J. Freyer, M.A., M.D., Mch., Surgeon to St. Peter's Hospital, Examiner in Surgery, Durham University. Second Edition. London: Baillière, Tindall and Cox. 1902. Price 5s.

Hospital when Mr. Freyer removed the entire prostate by his method, and the simple and rapid manner by which the gland was extirpated struck him with the greatest surprise. We commend this little work to those interested as a valuable addition to the surgery of the subject.

"YEAR-BOOK OF PHARMACY. (a)

"The Year-Book of Pharmacy" for 1901 is of great interest and permanent value to members of the medical profession in that it deals very fully with the recent arsenical beer poisoning. It is unaccountable how arsenic contaminating glucose could produce toxic effects in quantities so much less than we formerly supposed possible, a toxicity greatly in excess of any of our pharmaceutical preparations of the drug. We also get an excellent summary of Ischirch's researches on resins, oleo-resins and allied substances, and of his attempt to classify resins on the rational ground of their chemical constitution. The alkaloidal assay of drugs by Gordin's method is given—a method by which a rapid and accurate determination of the basic active principles may be made.

No new remedies were introduced during the year, and of the many synthetical, so-called new, preparations introduced they were little more than proprietary mixtures introduced under catching fancy titles. If space permitted we would like to make more than passing reference to the effect of the weather on the physiology of plant life and its influence on the production of esters as shown by the effect of the unfavourable influence of the weather on the recent crop of bergamot and lemon oils, to which reference is made in the "Year-Book."

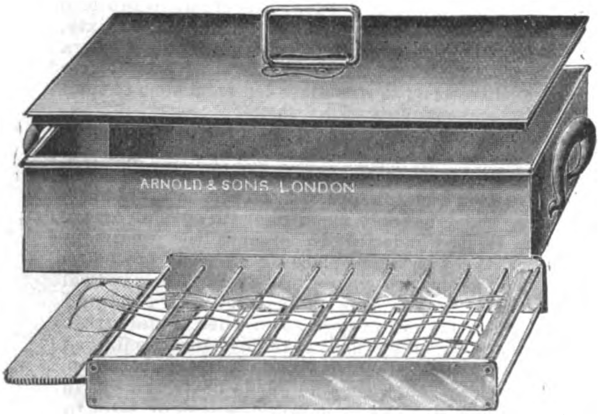
Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

A SURGICAL SILK RACK.

To the Editor of The Medical Press and Circular.

Sir,—It is strictly in accordance with the principles of aseptic surgery to boil the silk used for operations for half an hour, and to keep it boiling until the time it is inserted, and to facilitate this object, and coincidently to greatly save the time of the operator, I would ask permission to call the attention of your readers to the following device.



A rack is constructed the appearance of which is illustrated in the accompanying sketch. It consists of two parallel metal sides united by parallel steel bars at right angles to the sides. The disposition of the bars need not be described, suffice it to say that their thickness and distance apart has been the subject of experiment. At one end is stretched horizontally, between two adjacent bars, linen, or preferably Billroth's cambric, extending from one side to the other. A similar arrangement is made at the opposite end diagonally. Projecting beyond the end of the rack proper is a horizontal tray, constructed of cambric, stretched on steel wire. All the metal work is thickly nickelled, and the apparatus is not liable to rust. The device is made in two sizes. The larger size, for use in the theatre of a hospital, is 13 inches long, 7½ inches wide, and 1¼ inches high, and the tray projects 2¼ inches, making the total length 15¼ inches. The smaller size for use at single, or it may be emergency operations, is 7½ inches over all, 3 inches wide, and 1 inch high.

The use of the rack is this: The needles are threaded with the silks to be used and fixed in the rack as described later on. The rack is boiled in a steriliser for half an hour, and kept boiling until the silk is required. The lid of the steriliser is removed, and the surgeon selects with forceps whatever needle and silk he requires. By pulling the needle from the tray and gently dragging on the silk the needleful is extracted with certainty, and removed for use without causing any tangling of the other contents of the rack. The larger rack when fully loaded will hold sufficient silk for half a dozen major operations. The smaller will comfortably hold sufficient for one or two. The racks should be boiled up again between the operations.

The loading of the rack is accomplished in the following manner:—The needles are threaded and the ends of the silk adjusted to approximate equality, the rack is turned on its side and a needle passed through the stretched cambric, and then over and under alternate bars in the same row until the tray is reached. Into this the point of the needle is stuck, the silk pulled moderately tight, and the loose ends cut off to within one inch of the stretched cambric. Both ends of the silk are fixed by this proceeding. One should start at one side of the rack with thick silk and large needles and proceed towards the other side with ever decreasing thicknesses of silk. Each needleful should not only be threaded over and under alternate bars, but should also alternate with the threads on each side of it, just as the woof crosses the warp in weaving.

In the smaller rack the starting-point is at the same end as the tray, and on the lower set of bars. In the larger form if the length of the doubled thread is desired greater than the length of the rack, the starting point is on the lower set of bars and a transition is made to the upper set after a suitable number of bars has been passed. The rack may be loaded with any length of silk up to eight times the length of the rack with the certain knowledge that the silk may be readily extracted when required.

If unthreaded "*ligatures*" are required, they are loaded in a similar manner except that they are single, and that after having been put in place the needle is removed. Great lengths of silk may also be sterilised by merely winding the silk round and round the four corner bars, which are placed on a different level from the others for this purpose.

If the loading is done in a systematic manner it only takes three-quarters of an hour to completely fill the large rack with silk. The most convenient sizes for an average afternoon's operations are:—

No. 3 silk ... 12 straight and 6 fully curved needles
No. 1 „ ... 3 „ „ 3 „ „ „
No. 00 „ ... 9 small „ 9 „ „ „

The advantages claimed for the apparatus are these: First, the silk is, often unlike the deeper layers of silk on a boiled reel, sterile at the time it is used. Second, any kind of silk on any kind of needle may be selected and obtained by the operator with great speed, often with the saving of valuable time. Third, the silks do not get entangled; indeed, the ease with which they may be extracted is quite remarkable.

The above pieces of apparatus may be used in any steriliser large enough for the purpose. It is, however, much more convenient to have one to fit the apparatus. The one supplied has a simple device which, while it allows the easy lifting out of the rack yet prevents its displacement when in use. The steriliser is also of such a size as to leave a space two inches wide for the coincident boiling of drainage tubes. Such a steriliser is kept boiling in the annexe to the theatre, and when required is brought in and used. It should not be laid directly on a towel-covered glass table, for the glass is liable to crack, but on a wooden or asbestos pad placed to receive it. The above apparatus is made in a most excellent manner by Messrs. Arnold, of West Smithfield, from an experimental model of my own construction.

(a) "Year-Book of Pharmacy:" comprising Abstracts of Papers relating to Pharmacy, Materia Medica, and Chemistry, contributed to British and Foreign journals, from July 1, 1900, to June 30, 1901. London: J. and A. Churchill. 1901.

I am, Sir, yours truly,
G. H. Colt.

Medical School, St. Bartholomew's Hospital,
London, E.C.

WHOOPING-COUGH IN PUBLIC CONVEYANCES.

To the Editor of The Medical Press and Circular.

Sir,—Travelling as I do a good deal in omnibuses and tramcars, I have been struck by the recklessness with which children suffering from whooping-cough are allowed to avail themselves of this mode of conveyance, with utter disregard, possibly in utter ignorance, of the extreme infectiousness of this troublesome and, in the aggregate, fatal malady. Whooping-cough not being scheduled as a notifiable infectious disease, no restrictions are apparently enforced in respect to the liberty to circulate of persons suffering therefrom, a lapsus in our sanitary administration which calls for immediate attention.

I hardly know to whom to address this suggestion, and I therefore avail myself of your columns in the hope that it may attract the attention of those with whom it rests to deal with the matter.

I am, Sir, yours truly,
Practitioner.

Medical News.

Small-pox in London.

The number of patients suffering from small-pox actually under treatment in the hospitals of the Metropolitan Board has now fallen to ninety, only twenty-five fresh cases having been admitted during the fortnight ending Saturday last. The report of the Committee on the communication from the Local Government Board, enclosing for the managers' observations, prints of a draft order prescribing fresh regulations with regard to the use of the small-pox hospitals for purposes of medical instruction, states that, after carefully considering the terms of this draft order, they had made application to the Board to issue the order subject to provision being made therein empowering the managers to determine from time to time the fees to be paid to the medical superintendent who might act as clinical instructor. Under Clause (3) of the draft order, the managers might make regulations in regard to the mode of conveyance to and from the small-pox hospitals and disinfection and discipline of students, provided that no such regulations should come into force until they were confirmed by the Board, and the committee had accordingly asked the Board to sanction the draft rules and regulations on this subject which were adopted by the managers on February 8th, 1902. It was reported that the admission of small-pox patients to the hospital ship had been suspended as from July 19th last.

A Munificent Donation.

It is announced that the Committee of King Edward's Hospital Fund for London has just received a magnificent endowment due to the generosity of Lord Mount-Stephen and Lord Strathcona, a gift estimated to produce £16,000 per annum at present, with a prospect of more in the future. An annual subscription of £500 by Sir Savile Crossley, M.P., is also promised.

Deaths under Chloroform.

An inquest was held on the 1st inst. at St. Pancras on the body of a man, æt. 40, who had succumbed at the workhouse to the effects of an anæsthetic administered for the purpose of an operation. A verdict of death from misadventure was returned. A death from the same cause is reported from Croydon, the victim being a man about to undergo a dental operation. It is unfortunate that in the reports of these inquests no information is usually forthcoming on the points which would assist us in elucidating the cause of the catastrophe, a catastrophe which, in a certain, but unascertainable, proportion of the cases, might doubtless be averted by more scientific methods of chloroform administration.

No Poison Label.

An inquest was held at Battersea a few days since on the body of a young married woman, who had succumbed to the effects of an overdose of morphine, taken under somewhat peculiar circumstances. It seems that her mother, who was suffering from cancer, was in the habit of taking large doses of morphine supplied by a local practitioner who had also supplied some medicine for the younger woman. The two bottles being very similar, the daughter took a dose from the wrong bottle, each dose of which contained two grains of the alkaloid. The sad occurrence suggests the propriety of affixing a caution label to medicines containing doses of a drug which would be lethal to others than the person for whom it is intended.

Cholera in Egypt.

The epidemic of cholera in Egypt is still in the period of extension, and during the four days ending Saturday last there were close upon 5,000 fresh cases, three-quarters of which proved fatal. Down to Wednesday of last week there had been 14,500 cases, with only 1,183 recoveries. It is anticipated that for some days to come we may anticipate some 1,500 fresh cases daily, and it will not be until towards the end of October that any notable decrease can be looked for. In Cairo itself there are marked indications of improvement, and this remark applies to most of the large towns.

Sudden Death of a Medical Practitioner.

Mr. Frederick Pratt, M.R.C.S.E., of Appledore, died suddenly while in attendance on a parturient woman, on the 3rd inst., the cause of death being heart disease.

A Public Vaccinator Asked to Resign.

Dr. Nix, Public Vaccinator to the Bury St. Edmunds Board of Guardians, originally sent in a bill for vaccinations amounting to upwards of £390, which was subsequently reduced by him to the comparatively modest figure of £50. At a recent meeting of the board surprise was expressed that he had not apologised for his mistake, and it was decided to request him to send in his resignation.

Dublin Death-rate.

The deaths registered in the Dublin registration area during the week ending Saturday, August 30th, 1902, represent an annual rate of mortality of 21·5 in every 1,000 of the population. Diseases of the nervous system caused 14 deaths; of the circulatory system, 18 deaths; and of the respiratory system, 16 deaths. Fifty-three infants died during the week, of whom 23 were under twelve months old. Within the city proper the death-rates in the following districts of Clarence Street North, Blackhall Place, and Castle Street were 29·9 per 1,000, 26·3 per 1,000, and 30·5 per 1,000 respectively.

Municipal Trading.

The Battersea Borough Council has for the last three months undertaken the task of supplying sterilised milk for the use of infants, and the innovation, we are assured, has met with a greater measure of success than was anticipated. Three different strengths of milk are prepared; one for children under three months, one for those under six months, and the third is intended for children up to a year. The milk when first received is filtered and diluted with the necessary amount of water. Cream and lactose are added to bring the milk up to the standard of human milk. It is then poured into stoppered bottles, which are placed, 500 at a time in the sterilising chamber. By means of steam jets the temperature is raised to about boiling point, at which it remains for a quarter of an hour. All germs are thus killed. The charge made for milk is 3d. per day, or 1s. 6d. per week for the full quantity required.

Medical Inebriety.

A Mr. Allan Wilson, described as a medical man, was fined for being drunk and disorderly at Horncastle, Lincolnshire, last week.

Notices to Correspondents, Short Letters, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

REMEMBER!

A correspondent suggests the following points in respect of pericarditis:—

Pericarditis.

Remember that the pericardium is a visceral joint.

Any cause which may give rise to inflammation of a joint may give rise to pericarditis.

Remember that pericarditis may usher in an attack of rheumatic fever.

Remember that pericarditis may be latent as in some renal cases, in which it may occur as a complication.

Remember in tuberculous pericarditis that if the left side of the chest be fixed by strapping, pain and dyspnœa will be relieved.

Avoid blisters in cases of pericarditis of renal origin, and remember that opium is badly borne by patients whose kidneys are incompetent. If effusion be present remember that the fluid may be (1) serum, (2) blood, or (3) pus. Therefore use an exploring needle of sufficiently wide calibre. A hypodermic needle is in many cases useless.

If the effusion be small, explore in the fifth intercostal space 1½ ins. from the left sternal border, thus avoiding the left internal mammary artery which runs down 1 in. from that border.

If the effusion be extensive explore in the left xiphi-costal angle in the direction directly upwards. Remember that every young anæmic girl complaining of dyspnœa and left infra-mammary pain is not simply a case of anæmia and hysteria, but may be suffering from pericarditis. Therefore in every case carefully examine the patient's chest.

In fifty cases a hæmic bruit only may be present, but in the fifty first early signs of pericarditis may be discovered.

Nemo.—There is really no occasion to invent a "tasteless" castor oil—the pure oil is normally tasteless, and it is the odour to which patients object. If the nose be firmly held during ingestion, and the mouth thoroughly cleansed before permitting the entrance of oil no inconvenience will be experienced.

THE CONSUMPTION OF TEA.

In 1882 the quantity of tea imported into France amounted to 475 tons. In 1895 it was 728 tons, and in 1901 861 tons. For the last four years the consumption of tea has remained stationary. As matters stand this consumption works out at only three-quarters of an ounce per head of the population as against 6 lb. per head in Russia, and 5 lb. per head in England. In the United States the quantity per head is estimated at about 1 lb., but tea seems to be giving place to coffee. In other countries, Switzerland stands at 1½ lb. per head, Germany at ¾ lb., Belgium about 2¼ ozs., Spain 1½ oz., and in Italy only ½ oz. per head.

D. I. (London).—We are ignorant of the nature of the proprietary medicine to which you refer, and cannot therefore offer any opinion as to its innocuousness. The practice of taking self-prescribed nostrums is one fraught with manifest dangers. Intellectual fatigue is not to be fought by drugs. It would be far better to seek skilled advice as to the cause of the debility and the means of preventing it.

GARNAULT *VERSUS* KOCH.

The *N. Y. Medical Record*, commenting upon the acrimonious remarks made by Koch on Garnault and *vice versa*, recalls that Koch accused Garnault of "playing to the gallery" by experiments which were neither scientific nor even serious. Garnault, much piqued, replied by calling Koch a "poseur" and a plagiarist. Our contemporary concludes that both parties are right in this wordy war—in their characterisations of each other.

Mr. A. R. Simson.—Your letter is much too long for our columns, moreover the subject has been already adequately dealt with.

DEPRAVITY IN WORDS.

If the Americans like to add new and outlandish words to their private language, that is exclusively their affair. But it is not altogether pleasant to find some of these words creeping into English newspapers. Latterly that most atrocious word, "electrocute," has made its appearance in more than one London newspaper. It was evidently invented by a man who fancied that "cute" meant "kill." Hence, if a man was killed by electricity he was said to be "electrocuted." There is no limit to the extent to which this system of inventing new words might be carried, says W. L. Alden in *Gossip*. If a man is drowned he may be said to be "watercuted." Similarly he may be "knifecuted," or "poisoncuted"; or "firecuted" if he is burned to death, or "traincuted" if he is killed on the railway, or "talkcuted" if he is a member of the House. Of all the words which have been recently thrust into the last edition of the biggest dictionary in the world, "electrocuted" is the most utterly depraved and infamous.

Appointments.

Bernstein, Julius M., L.R.C.P., M.R.C.S.Eng., House Physician at the Manchester Royal Infirmary.

Bowdler, A. Penrhyn, M.A., M.B., B.C.Camb., L.R.C.P., M.R.C.S., House Physician to the Victoria Hospital for Children, Chelsea.

Crow, John, M.B., Ch.B.Glasg., Certifying Surgeon under the Factory Act for the Large District of Ayrshire.

D'Ewart, John. M.R.C.S., L.R.C.P., House Physician at the Manchester Royal Infirmary.

Ellerton, H. Byam. M.R.C.S.Eng., L.R.C.P.Lond., Senior Assistant Medical Officer to the Metropolitan Asylum for Imbeciles, Leavesden, Herts.

Merrick, Ferdinand R. H., M.D.Dubl., Medical Officer of Health of the Rural District of Basingstoke.

Moore, W. B. A., L.R.C.S., L.R.C.P.Irel., Resident Medical Officer Mercer's Hospital, Dublin.

Tylecote, J. H. L., M.B., Ch.B.Vict., Chief Medical Officer of the Gold Coast Government Railway.

Valentine, W. R., M.D., B.Ch.Dubl., Honorary Surgeon to the Bideford and District Dispensary and Infirmary.

Walker, T., M.R.C.S., L.R.C.P., House Surgeon at the Manchester Royal Infirmary.

Wilkins, Arthur G., M.B., Ch.B., Resident Medical Officer to St. Mary's Hospital for Women and Children, Manchester.

Vacancies.

Clifden Union.—Midwife. Salary £25 per annum. Immediate applications to F. King, Clerk of Union. (See advt.)

County Borough of Northampton.—Medical Officer of Health. Salary £500 per annum. Applications to Herbert Hankinson, Town Clerk, Guildhall, Northampton.

County Mayo Infirmary.—House Surgeon and Compounder. Salary £109 per annum, with apartments, &c. Applications to Dr. O'Malley Knott, Mayo Infirmary, Castlebar. (See advt.)

Denbighshire Infirmary, Denbigh.—House Surgeon. Salary £100, with board, residence, and washing. Applications to W. Vaughan Jones, Secretary.

East Sussex New Lunatic Asylum.—Medical Superintendent. Salary £900 a year, with unfurnished house, electric light, coals, vegetables, milk, and washing. Applications to Reginald Blaker, Clerk of the Visiting Committee, 211, High Street, Lewes.

Glenties Union.—Medical Officer. Salary £100 per annum Applications to Michael M'Nelis, Clerk of Union. (See advt.)

Liverpool Dispensaries.—Assistant Surgeon. Salary £100 per annum, with board and apartments. Applications to Sam. B. Leicester, Secretary, 56, Vauxhall Road, Liverpool.

Liverpool Infectious Diseases Hospitals.—Assistant Resident Medical Officer. Salary £120 per annum, together with board, washing, and lodging at the Hospital. Applications to the Chairman of the Port Sanitary and Hospitals Committee, under cover to the Town Clerk, Municipal Offices, Liverpool.

Morpeth Dispensary.—House Surgeon. Salary £120 per annum, with furnished rooms and attendance. Applications to Honorary Secretary.

North-Eastern Hospital for Children, London.—Resident Medical Officer. Salary £120 per annum, with board, residence, and washing allowance. Applications to T. Glenton-Kerr, Secretary, 27, Clement's Lane, London, E.C.

Pharmaceutical School of Botany and Materia Medica, Ireland.—Professor of Materia Medica. Applications to Arthur T. Ferrall, Registrar. (See advt.)

Roxburgh District Asylum, Melrose, N.B.—Assistant Medical Officer. Salary £120 per annum, with board, rooms, and washing. Applications to the Medical Superintendent.

Southwark Union, London.—Second Assistant Medical Officer at their Infirmary, East Dulwich Grove, S.E. Salary £100 per annum, with board, lodging, and washing. Applications to Howard C. Jones, Clerk, Union Offices, John Street West, Blackfriars, S.E.

Births.

Arkwright.—On Sept. 5th, at Halesowen, the wife of Joseph A. Arkwright, M.D., of a daughter.

Berry.—On Sept. 3rd, at Richmond House, South Lowestoft, the wife of Walter Berry, M.D., of a daughter.

Bulleid.—On Aug. 30th, at Midsomer-Norton, the wife of Arthur Bulleid, L.R.C.P., L.R.C.S.Ed., of a daughter.

M'Clintock.—On Sept. 1st, at Rowley, Church Stretton, the wife of John M'Clintock, L.R.C.S.Ed., of a daughter (prematurely).

Marriage.

Fox—Lewis.—On Sept 3rd, at All Souls' Church, Langham Place, London, W., Campbell Tilbury Fox, F.R.C.S.Eng., L.R.C.P. Lond., of Ashford, Kent, son of the late Tilbury Fox, M.D., F.R.C.P., to Hilda Lewis, daughter of A. Lewis Esq., of Seaham Harbour, Co. Durham.

Holzberg—Korthals.—On Sept. 8th, at St. George's Church, Hanover Square, London, Albert Holzberg, E.A., Ph.D. Principal of Heidelberg College, Heidelberg, to Henriette Gertrude, only daughter of W. C. Korthals, formerly Dutch Consul, Japan.

Horder—Doggett.—On Sept. 3rd, at the Parish Church, Newnham, Herts, Thomas Jeeves Horder, M.D.Lond., M.R.C.P., 141, Harley Street, London, W., youngest son of the late Albert Horder, Wincombe, Swindon, to Geraldine Rose, only daughter of Arthur Doggett, Esq., of Newnham Manor, Baldock, Herts.

McGinn—Murphy.—On Sept. 6th, at St. Peter's Church, Cardiff, John McGinn, L.R.C.S.I., of Newport, Mon., to Florence Louise, younger daughter of Arthur J. Murphy, of Llantarnam.

Deaths.

Ashley.—On Sept. 3rd, at 3, Sion Hill, Clifton, Bristol, Ambrose Humphreys Ashley, M.R.C.S., &c., late H.E.I.C.S., aged 87 years.

Aveling.—On Sept. 5th, at Mullion, Cornwall, whilst bathing, Charles Taylor Aveling, M.S., M.D.Lond., F.R.C.S., late of Stamford Hill, aged 58 years.

Grant.—On Sept. 2nd, at Ninnage Lodge, Westbury-on-Severn, Henry Sanders Grant, M.R.C.S., aged 76.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

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INTRODUCTORY REMARKS.

THE conditions of medical education have undergone considerable modification during the past quarter of a century, but the First of October remains a red-letter day in the medical student's career. Not of course that this date marks the epoch of the momentous decision in virtue whereof the young man, not long since liberated from the strict discipline of school life, enters his name at a recognised school of medicine. It remains for the most part the day of the *entrée en scène*, the day when, for the first time, he enters into possession of his status as a medical student; when, for the first time, he is brought face to face with the surgical and medical authorities who, for a brief span of years, will constitute his intellectual horizon. By way of preparing him for his new life it is the custom — a custom gradually falling into disuse — to treat him, collectively, to an address of welcome. In this address it is traditional to sketch the main features of the career upon which the student has now solemnly entered, coloured according to the mental temperament of the lecturer, sometimes in rosy hues, sometimes with a liberal allowance of darker shades. The truth, of course, lies between the extremes. We may premise, by way of an introductory aphorism, that "Medicine is a wholly admirable profession, but for the most part it is a poor business"; in other words, while it secures to its followers a certain social position (which, however, is determined far more by personal than by professional status) it must not be expected to provide them with "wealth beyond the dreams of avarice," or even that which an equal amount of brains and energy might, with good luck, secure in the commercial walks of life. Virtue, we are assured, is its own reward, and so is very largely the practice of medicine. It is distinctly a sympathetic calling, one which brings us into contact with poor suffering humanity under circumstances which divest human intercourse of much of its acrimony and bitterness, circumstances in which it is at once a privilege and a pleasure to minister to the requirements of those who look to us for assistance.

A lawyer is of service at most in his own country, his ministrations are limited to the territory within the jurisdiction of the courts to which he owes allegiance. The medical man, on the other hand, is cosmopolitan, his nationality, his language, his creed, are lost sight of provided only that in case of need he can render the precious services which are his prerogative irrespective of environment. *Acta non verba* is his maxim, and the object and aim of medical education is to place it within his power to put that maxim in practice in assuaging suffering and prolonging life.

There are no Lord Chancellorships in medicine, and politics, which, in the legal world, are often the stepping stone to promotion, are injurious to the practice of medicine and inimical to the pursuit of studies which tend to extend the horizon of medical science.

Medicine, then, is a career only to be entered upon by those who are willing to live a life of sacrifice and abnegation in exchange for a modest but assured livelihood. The labourer is worthy of his hire, but he must not expect more. The medical practitioner must not expect great social success, honours, and sittings in the seats of the mighty. It is quite open to question whether such things are intrinsically worth striving after, whether in fact they are legitimate aims in life. Such honours, when they come, are of value, less in that they honour the individual than because they testify to public appreciation of the profession. If they are not more frequently the lot of the practitioner of medicine it is doubtless because the practice of medicine is not a calling in which the merits of its adepts are proclaimed from the housetops, the newspapers do not chronicle its heroism, and it occupies a subsidiary place on the world's stage; moreover, even the leaders of the profession are rarely rich enough to support the burden of embarrassing dignities or hereditary honours.

THE MEANS AND THE END.

Much might be written in regard to the choice of a school, large or small, metropolitan or provincial, but the choice is almost invariably made on other than purely reasonable grounds. Often it is decided by parental example, sometimes having regard to the question of comparative fees, and at others it is decided by fortuitous circumstances. The self-controlled, strong man, especially if he has already had the advantage of a period of university training, will find most scope in the large schools, where competition is fiercest but where the prizes are more important. The younger student, as yet hardly fit to be entrusted with his own destiny, will be better looked after in one of the smaller schools where the staff take a keener personal interest in their pupils. But ere now the die is cast, and it only remains for the student to survey the *champ de manœuvres* and do his best.

Of greater immediate importance is the choice of qualifications, for this is a point which has to be decided at the very onset of the student career. Not so many years ago the membership of the College of Surgeons with, perhaps, the licence of the Apothecaries' Society, was held to be amply sufficient for general practice. Nowadays, however, even with the licence of the College of Physicians thrown in, mere diplomas are looked at askance by all save the unambitious. Not that the diploma of the Conjoint Boards indicates other than a high standard of professional attainments; indeed, as a matter of fact, the examinations are as severe, and their diplomas as difficult to obtain, as those of most universities. The northern universities, however, have flooded the country with graduates who, on the strength of the M.D., are credited by the public with superior professional attainments, in such wise that the college diplomate who is not technically entitled to assume the title of "Dr." finds himself in an invidious position in practice, hence the very general desire to obviate any drawback of this kind. The difficulty has been surmounted in the provinces to a great extent, thanks to the multiplication of universities, but in London matters are still in a stage of transition. Under existing circumstances the student at a London school will be well advised to enter for the London University course, although there is every prospect that before those now commencing their studies have completed the curriculum the colleges will have become affiliated to the university.

The Course of Study.

Owing to the numerous additions which have been made to the curriculum and to the steady rise in the standard of knowledge required of students all round, the extended period of five years will be found none too much for the work to be done within that time. The student therefore will find it necessary to start methodical work at once. He begins with anatomy, physiology, and materia medica, the threefold basis of practical medicine, assuming that he has availed himself of the facilities afforded him to get through his preliminary scientific work before entering a medical school. He should especially bear in mind that medicine is a practical science, and that the value of his knowledge will be in proportion to its practical bearings. The importance of actual dissection cannot be over-estimated, for no amount of mere book work can confer on him that familiarity with the anatomical structure o the human body which is indispensable to useful work later on. The study of practical anatomy is a valuable mental training, to say nothing of the manual dexterity which is acquired by careful dissection. Hardly less important is it to acquire an individual knowledge of the physical characteristics of drugs and their properties. The great majority of students will, later on, have to dispense their own medicines, and to do this with safety to the patient and credit to themselves necessitates a certain familiarity with the substances employed. The student should bear this fact in mind, especially as the licensing bodies of late display a tendency to treat this department of study with less respect than it merits.

The Clinical Work.

It is in the wards and in the out-patient department after all that the student acquires most of his information concerning the course and treatment of disease. There he watches the daily progress of morbid processes, and learns the means employed to afford relief or to bring about recovery. It will be his privilege to unravel the tangled threads of each patient's life history, and by the careful collection and careful examination of data to arrive at a reasoned conclusion known as the diagnosis. In this way he will gradually learn to recognise the main principles which underlie the practice of medicine. Each patient who comes under his observation will, if properly studied, yield his quota of practical knowledge, and the value of the opportunity depends upon the ability and willingness of the student to avail himself thereof. The object and aim of clinical training is to cultivate the student's powers of direct observation and to train him to make correct deductions, and the habit of careful observation is one which should become second nature. The instruction received in the wards is incomplete unless supplemented by the lessons to be learned in the post-mortem room. The post-mortem examination is the touchstone of diagnosis and, in some cases, the opprobrium of treatment. There the student can follow the morbid process to its logical conclusion. The post-mortem room is the natural complement of the ward, and it is often only in this room that the clinical problem is unravelled and the student enabled to observe the organic lesions which determined the symptoms he has been studying. Incidentally the student should learn as much as he can of the method of carrying out these examinations, for it falls to the lot of most practitioners to have to make such examinations, and errors of observation or appreciation may be fraught with the gravest consequences to possibly innocent persons.

The Higher Qualifications.

There remains the question of the higher qualifications, *e.g.*, the Fellowships of the Royal Colleges, which are indispensable to those who contemplate a hospital career either as physician or surgeon. The Fellowship of the Royal College of Physicians is not obtained by examination but by selection from among the members. Candidates for the membership are required to pass a searching examination and to satisfy certain other requirements before they can be admitted thereto, and subsequent elevation to the Fellowship is largely a matter of personal influence, though merit *per se* is not a bar to selection. The Fellowship of the Royal College of Surgeons, on the other hand, is a purely professional distinction, and is open to anyone who can pass the examinations. It is advisable to pass the first examination for the Fellowship as soon as possible after passing the first membership in order not to have to go over the ground afresh later on.

Choice of a Career.

For five long years at a minimum the student's ambitions do not soar beyond the boards of examiners. To obtain the right to practise is, for the time being, the object of his existence. When he has entered the portals of the profession he is confronted with the troublesome question of deciding in what particular direction he shall direct his energies. Many neo-practitioners, not unwisely, spend a year or two in resident appointments at their own hospitals or at some provincial hospital, infirmary, &c. Others acquire a knowledge of the practice, as distinguished from the theory, of medicine by serving as assistant or locum tenens. Others, again, either join their parents in practice or purchase partnerships. Then, too, there are the Services—Indian, Army, Navy and Colonial—to choose from. The Poor Law Infirmaries provide each year a certain number of appointments, and these are the first rungs of the ladder which leads to the superintendency of these institutions. These posts are fairly remunerated, and afford reasonable security of tenure, but they entail much hard work, together with heavy responsibilities.

Public Health Service.

Every student who can afford the time is strongly advised to qualify in State Medicine, since this diploma renders its holder eligible for appointment as medical officer of health, and moreover the knowledge thus gained is invaluable in every department of practice. A diploma in State Medicine entails a special course of preparation and training subsequent to qualification, the conditions of which will be found under the appropriate heading. Although the tenure of office is not as yet on a satisfactory basis, there are many valuable appointments of the kind which afford magnificent scope for intelligent activity.

Post-Graduate Instruction.

Medicine, with its continually widening scope and added requirements, has become a field of vastly greater extent than was the case a few decades ago, and when he enters upon his professional work the conscientious practitioner is apt to experience a painful sense of his shortcomings in very many branches of medical practice. The knowledge which has been rendered available of recent years has obviously placed a peculiar responsibility upon the physician fresh from his studies. The desire so generally felt by men in practice to extend and complete their knowledge of special subjects has led to the organisation of post-graduate institutions on a large scale, of which advantage is freely taken by those who are fortunate enough to reside within accessible distance thereof. We would strongly urge senior students and young practitioners to avail themselves of every opportunity to acquire a working knowledge of the various special branches—eye, ear, throat, gynæcology, &c. This leads us to the question of

Specialism in Medicine.

Hitherto the student has been taught that "the greatest mistake of all is to start in a specialty without being thoroughly grounded in general practice." Admitting that it behoves everyone, no matter what particular department of practice he may decide to adopt, to have acquired a thorough grounding in the general principles of medicine, it is impracticable for him to devote much time to general *practice*. On the contrary, there is much to be said in favour of the view that it is best for the young practitioner to make his choice at the earliest possible moment of the line of work which he designs to follow. Vacillation at this early stage of his career does not tend to beget confidence among his elder colleagues, and certainly does not improve his chances of making a reputation as a specialist. As soon as he has qualified, therefore, or as soon after as may be, the intending specialist should endeavour to obtain a junior post in one or other of the special hospitals, where he can gradually work his way up.

Medical Practice in Foreign Countries.

Practitioners qualified in Great Britain who desire to practise their profession abroad are still confronted with many difficulties. True, a step in the direction of reciprocity has been taken in the case of Italy, but elsewhere in Europe considerable difficulty will be experienced in obtaining permission to practise; indeed, with the one exception of Italy, it is usually necessary to go through the whole curriculum and pass the totality of the examinations. These special requirements will be found elsewhere.

LONDON SCHOOLS.

The Schools of Medicine in the Metropolis are the following, the scholarships, prizes, students' appointments, fees, &c., being set forth in connection with each place named. The names of the hospital staff, lectures, residential terms, and detailed information will be found, as a rule, in our advertisement columns.

St. Bartholomew's Hospital.—This hospital has 750 beds, and for many years past the school attached has had a larger number of entries than any other medical school in London. Collegiate residence is here permissible, subject to the ordinary rules. The recreation ground for the use of students is at Winchmore Hill.

Appointments.—Ten house physicians and ten house surgeons are appointed annually. During the first six months of office they act as "junior" house physicians and house surgeons, and receive a salary of £25 a year. During their second six months they become "senior" house physicians and house surgeons, and are provided with rooms by the hospital authorities, and receive a salary of £80 a year. A resident midwifery assistant and an ophthalmic house surgeon are appointed every six months, and are provided with rooms and receive a salary of £80 a year. Two assistant anæsthetists are appointed annually, and receive salaries of £120 and £100 a year respectively. An extern midwifery assistant is appointed every three months, and receives a salary of £80 a year. Two assistant electricians are appointed every six months, and in-patient dressers, in-patient clinical clerks, clerks and dressers to the assistant physicians, and to the physicians and surgeons in charge of special departments are appointed every three months without fee.

Scholarships, &c.—There are four open scholarships in science, £75, £75, £150, £50, tenable for one year, and a Jeaffreson exhibition, value £20: at the end of first year four junior scholarships of £30, £20, £25, £15, respectively; Treasurers' prize for practical anatomy: Foster prize in practical anatomy; senior scholarships, value £50, for anatomy, physiology, and chemistry; Wix prize, Hichens prize, Lawrence scholarship and gold medal, value 40 guineas, for medicine, surgery, and midwifery; two Brackenbury scholarships, of £39, in medicine and surgery: Bentley prize, for reports of surgical cases; the Kirkes gold medal for clinical medicine, with scholarship of £30 Shuter scholarship of £50; Skynner prize of £15: Sir G. Burrows' prize of £10 and Matthews Duncan medal and prize, value about £20; the Treasurer's Research Studentship, of the value of £100, is given annually, the elected student being required to engage in original research in pathology.

Fees.—Fees for perpetual attendance on lectures and hospital practice, 160 guineas, payable in the following instalments:—First year, 40 guineas; second year, 40 guineas; third year, 40 guineas; fourth year, 40 guineas; or a single payment of 150 guineas. Fee for general subjects for students of general surgery: First winter, 31½ guineas; first summer, 31½ guineas; or a single payment of 63 guineas. Fee to University students, 80 guineas; fee for laboratory instruction for D.P.H., 15 guineas; composition fee to University of London students for one year's instruction for the Preliminary Scientific Examination, 20 guineas. Composition fee to University of London students who have passed the preliminary scientific examination, 150 guineas.

The Warden, Dr. James Calvert, will furnish further details on application.

Charing Cross Hospital.—The school attached to this hospital is situated in central London, and contains new physiological, pathological, and bacteriological laboratories, materia medica museum, an anatomical theatre, enlarged dissecting-room, and chemical theatre. The hospital and convalescent home contain 260 beds available for clinical study.

Clinical instruction is given in medicine, surgery, and obstetrics, and in the special department, diseases of the skin, diseases of children, mental disorders, the throat, the eye, nose and ear, and in the orthopædic, Röntgen, and electrical departments.

Scholarships, Medals, &c.—Five entrance scholarships, the Livingstone scholarship, 60 guineas, and 55 guineas; Huxley scholarship, 40 guineas and 30 guineas. Three (100 guineas, 60 guineas, and 40 guineas) are open to all general students, one (55 guineas) is reserved for the sons of medical men, and one (30 guineas) is open to dental students only. All are awarded annually. Two Universities scholarships, value 72 guineas each, are open to students from the University of Oxford who have passed the 1st M.B., to students of the University of Cambridge who have passed the 2nd M.B., and to students of the University of London who have passed the intermediate examination in medicine. Candidates must give notice to the librarian of their intention to compete on or before September 21st, 1902. The Golding Prize of £10 is open to students at the end of their first winter session. The Huxley Medal, with prize of £10, is open to students at the end of their second winter session. The Pereira Prize of £5 is open to all general students. The Llewellyn Prize of £25 is awarded annually at the end of the curriculum. The Governors' Clinical Gold Medal is also open to students at the end of their curriculum, and a silver medal or its equivalent in books is awarded to the most distinguished student in each class.

Appointments.—The curator and pathologist is appointed annually, and receives £100 a year; medical and surgical registrars to the hospital receive £40 a year each, with luncheon in the hospital; obstetric registrar, six house physicians, six house surgeons, and two resident obstetrical officers are appointed each year; clinical clerks, dressers, and surgical ward clerks are appointed in all the general and special departments of the hospital.

Fees.—For the curriculum of study required by the various examining bodies and hospital practice, 110 guineas in one sum, or 121 guineas in five instalments.

The composition fee for sons of registered medical practitioners is 110 guineas, and the fee by instalments, 121 guineas. For dental students, 54 guineas in one sum, or 60 guineas payable in two instalments.

St. George's Hospital.—This hospital is situated in a favoured position in the West End, facing Hyde Park. It contains 350 beds, and special wards for ophthalmic cases and diseases of women.

Appointments.—Four house physicians and four house surgeons, entitled to reside and board in the hospital free of expense; two assistant house physicians, two assistant house surgeons, four assistants in the special departments. Candidates for the above offices are selected quarterly by competition from among the perpetual pupils, and hold all the offices in succession during a period of two years, sixteen pupils being in office at any one time. Obstetric assistant with a yearly salary at the rate of £100 and board and residence in the hospital; pathological curator with a salary of £100; assistant curator with a salary of £50; two medical registrars, with salaries of £50 and £30 per annum; a surgical registrar with a salary of £50 per annum; an administrator of anæsthetics with a salary of £50 and two with salaries of £30 per annum; a surgery officer with a salary of £100 a year; two or more demonstrators of anatomy with a salary of £50 each; and assistant demonstrators. All offices are open to candidates without additional fee.

Exhibitions, &c.—The Brown exhibitions, one of £100 per annum, tenable for two years, and open to perpetual pupils possessing a registrable diploma; and one of £40 per annum, tenable for three years and open to students of two years' standing or upwards, who at the time of competition have not been qualified to practice medicine and surgery for more than three years. The Brackenbury prizes of the value of £40 each, one each in medicine and surgery. The Webb prize in bacteriology, value £30. The Clarke good conduct and clinical work prize in surgery, the Thompson medal, the Brodie clinical prize in surgery, the Johnson prize in anatomy, the Pollock clinical prize in physiology, the Treasurer's prize for clinical reports, and four general proficiency prizes of ten guineas each.

Scholarships.—One in Arts of £150 for sons of medical men who have entered the school during the current year. One in Arts, of £50, open to students under twenty years of age. Examination, September 24th. Two of £85 in anatomy and physiology, open to students who have signed up for or passed the first M.B. Oxford or second M.B. Cambridge. One of similar value for students of Provincial University colleges of similar standing Examination, September 24th.

Fees.—Composition fee for perpetual pupils, £150, or £160, in the following instalments: First year £50, second year £50, third year £40, fourth year £20. The fee for general subjects in dental surgery is £55, payable in two instalments: first year £30, second year £25. Only perpetual pupils can hold house office or compete for the Brown exhibitions.

Guy's Hospital.—This hospital is situated on the Surrey side of London Bridge, and contains 650 beds with special wards for ophthalmic and obstetric cases. A special ward has now been set apart for diseases of women, eight beds being appropriated for difficult cases of labour. An obstetric registrar and tutor and an ophthalmic registrar and tutor have been appointed to augment the teaching in the special departments. Attached to the hospital is a large residential college with rooms for about sixty men, whilst for students who prefer to live in the suburbs, no other hospital is so conveniently placed, the railway accommodation being good and close at hand. There is now a complete School of Dental Surgery at this Institution, which is recognised by the Royal College of Surgeons of England, the facilities thus afforded of completing the whole course of dental study within the walls of one hospital will be appreciated by those intending to practise dentistry.

Appointments.—Eight house surgeons, eight house physicians, eight assistant house physicians, twenty-four assistant house surgeons, eight obstetric residents, twenty-four clinical assistants, and ninety-six dressers are selected annually from the students according to merit, and without payment. There are also a large number of junior appointments, every part of the hospital practice being systematically employed for instruction.

Scholarships.—Open scholarships of £100 or £50 in classics, mathematics, and modern languages. Open scholarships of £150 and £60 in chemistry, physics, and biology, and an open scholarship of £50 for University students in two of the following subjects:—Anatomy, physiology, organic chemistry, zoology, physics. Six scholarships, varying in value from £13 to £25 each, for general proficiency in medical study, open to students of different years. The Treasurer's gold medal in medicine; the Treasurer's gold medal in surgery; the Sands Cox scholarship of £15 per annum for three years for physiology; the Michael Harris prize of £10 for anatomy; Beaney prize in pathology, 30 guineas; the Beaney scholarship in materia medica, 30 guineas; the Golding-Bird gold medal and scholarship (£20); and the Gull Research scholarship of £150 per annum. The Physical Society awards two prizes, each of £5, to the authors of the best essays on selected subjects, prizes of £10 and £5 for the best papers read before the Society, and a prize of £5 to the member who has most distinguished himself in the debates of the session.

New School Buildings.—A considerable addition to the school buildings was opened in 1897, comprising a series of class-rooms, laboratories, and a lecture theatre for the teaching of physiology.

Fees.—For the entire course of lectures and hospital practice, 150 guineas, if paid in one sum on entrance; or payment may be made by four instalments of 40 guineas each, payable at the beginning of the first, second, third, and fourth years respectively.

King's College Hospital.—This hospital is centrally situated, being contiguous to the Royal College of Surgeons, Lincoln's Inn Fields. The College adjoins Somerset House and is close to the hospital, in which there are 220 beds available for clinical teaching; ophthalmic, ear, throat, skin, and dental departments are attached to the hospital. Some wards are specially devoted to children's diseases. The wards have been recently refloored and the electric light installed throughout.

Scholarships.—£800 are awarded annually in scholarships and prizes. At entrance two science exhibitions of £60 and £40 value are open to all candidates under the age of nineteen; two scholarships of the value of £75 each (subjects literary), and two exhibitions of the value of £60 and £40 each (subjects scientific) are open to students commencing their curriculum. Two scholarships, value 70 and 60 guineas, are open to students of a British University who come up to London to complete their curriculum; two junior scholarships of £20 each for first year students, one of £30 for second year students, one of £50 for third year students in residence, and one of £40 for fourth year students. In addition students may compete for the Daniell scholarship, value £40; the Warneford prizes, value £40; the Rabbeth scholarship, value £20; the Carter, Todd, Jelf, Tanner, Leathes prizes, and all class and clinical prizes.

Appointments.—Medical and surgical Sambrooke registrarships, tenable for two years, each £50 per annum. Resident hospital appointments, viz., senior and junior house physicians, assistant house physician, physician accoucheur's assistant and assistant house accoucheur, and three house surgeons with free board and residence at the hospital; and senior and junior clinical assistants in special departments.

University of London.—Special courses of lectures and practical instruction in the chemical, physical, and physiological laboratories have been arranged for students preparing for preliminary scientific and intermediate science examinations of the University of London.

F.R.C.S. Examinations.—Special classes are arranged for the final F.R.C.S. examinations. Further particulars can be obtained from the Dean.

London Hospital.—This hospital is the largest in England, containing as it does, 800 beds. It has, moreover, wards and a teaching staff for almost every special department in the domain of medicine: the scholarships and prizes are many and valuable, and both school and staff are deservedly popular with students.

Scholarships and Prizes.—At Entrance.—Price scholarship in science, £120; Price scholarship in anatomy and physiology, £60; entrance scholarships in science, £60 and £35; Epsom scholarship, £126; Buxton scholarships in arts, £30 and £20. After Entrance.—Anatomy and biology scholarship, £20; anatomy and physiology scholarship, £95; Letheby prize, senior, £20; Letheby prize, junior, £10; scholarship in clinical medicine, £20; scholarship in clinical surgery, £20; scholarship in clinical obstetrics, £20; Duckworth Nelson prize, £10; Hutchinson prize, £35; Sutton prize, £20; Sir Andrew Clark prize, £26; Anderson prize, £9; Out-patient dressers' prizes, £60; practical anatomy prizes, £10.

Appointments.—The "House" appointments, which are more numerous than at any other hospital in the Kingdom, are made without fee of any kind, and all resident officers are provided with free board and rooms, and in some instances with salary also.

The additional buildings for the department of public health, for the biological, chemical, and physical laboratories, materia medica museum, &c., and the new bacteriological department with general laboratory, research laboratories, class rooms for D.P.H. work, sterilising room, animal room, &c., are now open. For all these departments special teachers have already been appointed, who are devoting their entire time to the particular subjects that they have undertaken. In addition to these alterations and additions, arrangements have been made in the hospital for additional clinical teaching.

Fees.—Perpetual fee for lectures, demonstrations, and Hospital Practice, payable in three instalments of 45, 45, and 40 guineas at the commencement of the first, second,'and third years respectively, 130 guineas; or, if in one payment, 120 guineas. A reduction of 8 guineas for chemistry and physics, and 5 guineas for elementary biology is made from the above fees, in the case of students who have passed in these subjects at the First Conjoint Examination before entering the College. Fee for students entering in their third year (their first and second years having been spent at a recognised medical school elsewhere), 60 guineas. (This fee is payable by students entering who have passed the first M.B. Oxford; the second M.B. Cambridge; or the Intermediate M.B. London.) Dental students (general hospital practice and lectures), 40 guineas. General fee for dental practice, 10 guineas.

Note.—A reduction of 15 guineas will be allowed to the sons of medical men from the perpetual fee if paid in full, or 5 guineas from each instalment.

Special entries can be made either for single courses of lectures or for hospital practice.

Accommodation is obtainable at a very reasonable rate close by, or in the suburbs a few minutes' distant by train. Dinners and luncheons are provided in the Students' Club, which, with the reading and smoking rooms, now form part of the college buildings. The "London Hospitals' Club Union" has a field for cricket, football, &c., with an excellent pavilion, at Hale End. The clubs and societies are open to all the students, and are warmly encouraged by the staff. The new club rooms, gardens, and forecourt are now open. Full particulars of the Warden, Mr. Munro Scott.

St. Mary's Hospital.—This hospital is situated at Paddington, near the terminus of the Great Western Railway, and at present contains 281 beds. Fresh laboratories, fitted with electric light and all modern improvements, for the study of pathology and bacteriology, have recently been added, and also a new physiological lecture-room. A special department of pathological chemistry has been instituted. The new wing, the ground-floor of which, comprising the new out-patient department, was opened in 1898, is now in process of completion. This will add to the hospital eighty-one new beds, and will include additional operating theatres, a new clinical laboratory, a clinical theatre, and an X-ray department.

Appointments.—All clinical appointments in the Hospital are free to students of the Medical School, and the resident medical officers are chosen by competitive examination. Six house physicians, six house surgeons, four obstetric officers, and two resident anæsthetists are appointed in each year, and receive board and residence in the Hospital.

Scholarships, &c.—One scholarship in natural science, of the value of £145, open to any gentleman who has not completed a winter session of study at a medical school. Two scholarships in natural science, each of the value of £78 15s., and one of £52 10s., under the same conditions. Two scholarships, each of 60 guineas, open to students from the Universities of Oxford and Cambridge. The scholarships will be awarded by examination on September 23rd and 24th.

Fees.—Fee for attendance on the full five years' curriculum of hospital practice and all lectures, demonstrations, and special tutorial classes, including membership of the Library, Medical Society, Students' Club, and all the athletic clubs, and the receipt of the hospital Gazette for five years, £140, paid in one sum on entering the school; or in instalments, £145

Students who have completed their examinations in anatomy and physiology at the Universities of Oxford, Cambridge, or other University, are admitted as perpetual pupils on payment of a fee of 60 guineas in one sum, or 65 guineas in two annual instalments. University students, prior to completing the anatomy and physiology examinations, pay an annual fee of 25 guineas. After completing the anatomy and physiology examinations, the inclusive fee may be paid.

Preliminary Scientific Course.—Special classes, including lectures and laboratory work, are held throughout the year.

Middlesex Hospital.—This hospital, which is conveniently situated in the centre both of business and residential London, contains 330 beds. There are special departments for cancer, and for ophthalmic, throat, aural, skin, dental, and children's diseases. Wards are also devoted to cases of uterine disease and of syphilis. The new school buildings are now in regular use. Residence for students is obtainable in the residential college, which has its frontage on the hospital garden.

Appointments.—Casualty surgical officer, casualty medical officer, six house surgeons, six house physicians, and two resident obstetric physicians. The above officers have residence and board in the college free of expense. Clinical clerks and dressers in all the departments are also appointed in addition to the foregoing.

Scholarships, &c.—Two entrance scholarships of the value of £100 and £60 respectively. One entrance scholarship of the value of £60, open to Oxford and Cambridge students only. (Subjects—Anatomy and physiology, including histology.) Two Broderip scholarships of £60 and £40 respectively, for medicine and surgery; John Murray medal and scholarship, awarded every third year; the Governor's prize of £21 for students in their final year. Hetley clinical prize, value £25, awarded annually for proficiency in practical clinical medicine, surgery, and obstetrics; the Lyell Gold Medal in surgery and surgical anatomy; the Leopold Hudson prize, value 11 guineas, in surgical pathology, including bacteriology; Freeman scholarship, £30, in obstetrics and gynæcology; exhibitions of 10 guineas and 5 guineas for anatomy and physiology to second and first year's students respectively, as well as class prizes in all subjects.

Fees.—General fee for the entire course of hospital practice and lectures, 135 guineas, if paid in one sum on entrance, or by instalments of 60, 50, and 35 guineas, payable at the commencement of the first, second, and third years respectively. General fee for members of a university who have completed one year of medical study, 90 guineas, if paid in one sum, or by instalments of 60 and 40 guineas. For those who have completed their anatomical and physiological studies the fee is 70 guineas on entrance, or in two instalments of 40 and 35 guineas. The composition fee for London University students who have passed the preliminary science examination is 115 guineas. The fee for the curriculum for dental students is 54 guineas on entrance, or two instalments of 40 guineas and 20 guineas.

St. Thomas's Hospital.—This hospital, with its medical school attached, is one of the schools of the University of London. It is situated on the southern embankment of the Thames, facing the Houses of Parliament, and contains 602 beds. The school buildings, which are separated from the hospital by a quadrangle, comprise numerous theatres, laboratories, and class rooms, which are well adapted for the modern teaching of large bodies of students in all subjects of the medical curriculum. There is a large library and reading room, and a very complete museum and gymnasium. A ground of more than nine acres in extent is provided at Chiswick for out-door sports.

A clinical laboratory is provided, in which all the more difficult methods of diagnosis, bacteriological, chemical, and microscopical, are carried on under the direction of a superintendent. The department for out-patients has been re-arranged, so that large numbers of students are enabled to follow closely the practice and teaching of the assistant staff. To this department there has been added a completely fitted operating room.

Appointments are open to all students. A resident assistant physician and a resident assistant surgeon are appointed annually at a salary of £100 with board and lodging. Two hospital registrars, at an annual salary of £100 each, are appointed yearly. The tenure of these offices may be renewed for a term not exceeding two years. An obstetric tutor and registrar is appointed each year at an annual salary of £50. Four house physicians, two assistant house physicians, four house surgeons, four assistant house surgeons, two obstetric house physicians, two ophthalmic house surgeons, and eight clinical assistants in the special departments are appointed every three months.

Scholarships, Prizes, &c.—Three entrance scholarships are offered for competition in September, viz., one of 150 guineas and one of £60 in chemistry and physics, with either physiology, botany, or zoology at the option of candidates, for first year's students; one of £50 open to University students who have passed in anatomy, physiology, materia medica, and pharmacy for a medical degree in any of the Universities of the United Kingdom, and have not entered as students in any London medical school. Copies of the examination papers of last year may be obtained on application to the medical secretary. Applications must be sent in not later than September 17th, with certificate of birth and of preliminary examination, and with a notification as to the optional subject chosen. Numerous scholarships, prizes, and medals are open to competition throughout the whole career of a student, including a Fellowship of £100 given by the Salters' Company for research in pharmacology.

Fees.—The fees may be paid in one sum or by instalments. Entries may be made separately to lectures or to hospital practice. Special arrangements are made for students from the Universities and elsewhere entering in their second or subsequent years, also for dental students and for qualified practitioners.

Special classes for the Preliminary Scientific and Intermed., M.B.Lond., for the Oxford and Cambridge examinations, and for the Primary and Final F.R.C.S., are held throughout the year.

A register of approved lodgings is kept by the medical secretary, who has a list of local medical practitioners and others who receive students into their houses. The prospectus of the school, containing full particulars as to fees, course of study advised, &c., and all necessary information, may be obtained on application to Mr. Rendle, the medical secretary.

University College Hospital.—This hospital is situated in Gower Street, not far from Euston Railway terminus. The college where the classes are held faces the hospital, on the opposite side of the street. The number of beds available for teaching purposes is 188.

Appointments.—Eight house physicians, six house surgeons, four senior and four junior obstetric assistants, and two ophthalmic assistants, are selected annually by examination from among the senior students, without fee. The house physicians and house surgeons reside in the hospital for a period of six months, and the senior obstetric assistants for three months, and receive their board and lodging free.

The offices of out-patient physicians' and surgeons' assistants, clinical clerks, surgeons' dressers, and ophthalmic surgeons' assistants are filled by pupils who are also students of the college, without additional fee.

Scholarships, &c.—Entrance scholarships: One of the value of £120, and two of 60 guineas for proficiency in science, the subjects being those of the Preliminary Scientific Examination of the University of London, and two of 80 guineas each, the subjects being anatomy and physiology; the Atkinson-Morley surgical scholarship of £45 a year, tenable for three years; Atchison's scholarship, value £55, tenable for two years; Sharpey physiological scholarship, value about £105 a year, tenable for three years; Filliter exhibition for proficiency in pathological anatomy, value £30; Erichsen prize, operating case, value £10 10s., awarded for practical surgery, Dr. Fellow's clinical medals, the Liston gold medal, Alexander Bruce gold medal, Cluff memorial prize, Tuke medals for pathology, class medals, &c., gold and silver medals or other prizes, as well as certificates of honour, are awarded after competitive examinations in particular branches of study. The Tuffnell scholarship of £80 for chemistry, two years', and the Clothworker's exhibitions in chemistry and physics of £30 each, can also be held in the medical faculty.

Fees.—The following have been grouped to meet the requirements of the various examining boards: 2. For the medical examination required by the Examining Board in England and the Society of Apothecaries: 150 guineas, if paid in one sum at the commencement of the course; 155 guineas if paid by instalments. 2. For those students who do not require to attend chemistry, pharmacy, and elementary biology at a medical school (under the regulations of the examining board in England) the fee is: 135 guineas if paid in one sum; 140 guineas if paid by instalments. 3. For the courses necessary for the Preliminary Scientific Examinations of the University of London, 25 guineas. 4. For the course of instruction for the Intermediate Examination in Medicine of the University of London, 60 guineas paid in one sum. 5. For the course of instruction for the final M.B. examination of the University of London, 80 guineas if paid in one sum; 82 guineas if paid by instalments. This course of instruction is also suitable for the corresponding examinations at the Universities of Oxford, Cambridge, and Durham. 6. Composition fee for dental students, for the courses required for the L.D.S., 65 guineas or exclusive of chemistry, practical chemistry, physics, and materia medica, 50 guineas. The composition fees, 1, 2, 4 and 5, admit to attendance on systematic lectures and to hospital practice, where this is included in the fee, during five years.

Westminster Hospital.—This hospital is conveniently situated, facing the Abbey, and is readily accessible from all parts of the metropolis. It contains 205 beds for general cases, and all the special departments. New school buildings have been erected close by which afford accommodation for 150 students. The class rooms, dissecting rooms, and lecture theatre are excellent samples of modern erections, affording ample scope for study.

Appointments.—Medical and surgical registrars, each £40 per annum; two house physicians, two house surgeons, two assistant house surgeons, and resident obstetric assistant. These officers, except the two first named, are all boarded free of expense Fourth year's students are appointed to be clinical assistants in the various departments.

Scholarships, &c.—(*a*) Winter Session—The Guthrie scholarship £60, entrance scholarship £40, entrance scholarship £30, dental scholarship £20; subjects, Latin, mathematics, experimental physics, chemistry, and either Greek, French, or German. University scholarships, £40 and £30, subjects, anatomy and physiology. Natural science scholarship, £60, same as for Prel. Sci. of University of London. Natural science scholarship, £40, chemistry and physics. Free presentation, open to pupils of Epsom Medical College. (*b*) Summer Session.—Natural science scholarship, £60, same as winter. Natural science scholarship, £40, same as above. Arts scholarship, £60, arts scholarship, £40, University scholarships, £40 and £30, subjects same as in winter session. (*c*) Prizes.—Treasurers', 10 guineas, for first year's men; Chadwick, 20 guineas for students of any year not exceeding fifth. To be competed for by unqualified men. Bird medal and prize, £14, for students who have completed fourth winter session. Sturges prize in clinical medicine £8, clinical surgery prize £5 to be competed for by unqualified men. And class prizes in the various subjects.

Fees.—In one payment of 110 guineas, or two payments of 60 guineas each, payable on entrance, and at the commencement of second year respectively, or by six payments distributed over six sessions of 25 guineas and 20 guineas alternately. Fees for shorter periods or for single courses may be learned on application to the Dean. Fees for dental students, payable in one sum on entrance, 50 guineas, or in two instalments of £27 10s.

London School of Medicine for Women (**Royal Free Hospital**).—This school, which is situated in Hunter Street, Brunswick Square, opens at the same time as, and the periods of study, lectures, &c., are similar to those at the ordinary medical schools. A dissecting-room, physiological, chemical, biological, physical, and pharmaceutical laboratories, and library are provided at the School, and clinical lectures are regularly delivered at the Royal Free Hospital close by, which institution is appropriated to the students at the School as a field of practical study; clerkships, dresserships, and two of the resident posts being tenable there without fee by women. Numerous scholarships and prizes are awarded, particulars of which can be obtained on application.

Fees.—The fee for the ordinary curriculum of school lectures is £90 if paid in one sum, or £95 if paid in instalments. The fee for clinical teaching is £35, or £40 if paid in instalments.

Special Classes for the Preliminary Scientific Examination of the University of London. For the whole course, 20 guineas.

EXTRA-ACADEMICAL INSTITUTIONS IN LONDON.

Cooke's Medical School.—This school is prepared to admit to its supplementary work all who may wish to join the same, but in regard to its curriculum work it does not receive more than half a-dozen students in the course of the year; these have special advantages both as regards anatomy and physiology, at charges but slightly in excess of current rates. By decision of various examining bodies gentlemen rejected at their anatomical and physiological examinations can get signed up for the supplementary work they are required to put in before re-examination. The school is also recognised for the special dissections for the Fellowship of the Royal College of Surgeons. The surgical operations are performed on the dead body, and these courses are recognised for army examinations, the Indian Medical Service, &c. The school possesses a good collection of physiological and chemical apparatus, and gentlemen preparing for the higher examinations, the F.R.C.S.Eng., M.B.London, Cambridge, Oxford, &c., receive special instruction in the more difficult subjects by separate classes.

London School of Dental Surgery.—This institution is the oldest of the Dental Colleges in the United Kingdom, and its teaching is recognised by the Royal College of Surgeons for the dental diploma. It is centrally situated in Leicester Square, is open daily, and under the supervision of a special staff and house surgeon. The mechanical laboratory is the most perfect of its kind, and its usefulness can hardly be overestimated. The Hospital, having been rebuilt recently, the accommodation is equal to all requirements. Demonstrators have been appointed to instruct the new students in the elements of operative dental surgery, and at the beginning of the session each demonstrator gives a course of lecture on this subject. There is the Saunders Scholarship and Walker Scholarship (entrance) value £20 each, awarded yearly, the Storer Bennett Research Scholarship, value £50, awarded triennially, and the eight house surgeoncies are filled by students of the hospital holding the L.D.S. Fee for two years' hospital practice required by the curriculum, including lectures, £50. The fee for three years' tuition in mechanical dentistry is 150 guineas.

National Dental Hospital.—This institution is situated near the border of North-West London (Great Portland Street, W.), and the same teaching faciliites and hospital practice are obtainable here as at the foregoing institution, special demonstrations being given by members of the staff There are also a mechanical laboratory, bacteriological laboratory, museum, students' common room, a metallurgical laboratory, extraction and stopping rooms, lecture hall, regulations room, &c., all lighted by electricity, and warmed and ventilated after the most approved requirements: in fact, this institution may be pronounced a model dental hospital and school. The winter session commences at the same time as at the medical schools, on October 1st. The medical tutors hold special classes before each College examination. The prizes include one entrance exhibition, value £15, and the Rymer prize of £5 5s. The fee for two years' hospital practice required by the curriculum including lectures, is £40.

London School of Tropical Medicine.—This institution is the outcome of a suggestion by the Right Hon.

Joseph Chamberlain, H.M. Secretary of State for the Colonies, and is situated at the Royal Victoria Docks, in connection with the Seaman's Hospital, than which no more suitable spot could be found, as ships arrive there in great numbers from the Tropics, affording immediate opportunity for the treatment of patients and for the study of tropical diseases. The school buildings are placed within the hospital grounds, and systematic courses of instruction are obtainable from duly authorised teachers throughout the year. Students also have the privilege of attending the medical and surgical practice at the Dreadnought Hospital, Greenwich. Information as to fees, &c., can be obtained of the Dean or the Secretary.

Medical students are admitted to the practice of the following metropolitan hospitals, to which no medical school is attached. Detailed particulars will be supplied on application to the various secretaries.

West London Hospital, Hammersmith.—This contains over 160 beds, and has an extensive out-patient department. Dresserships and clinical clerkships may be obtained. Two house surgeons and two house physicians are selected every six months. Special departments have recently been opened for diseases of the throat, ear, skin, and deformities. An electrical department has also been added.

Great Northern Central Hospital, Holloway Road, N.—This institution has been recently enlarged, and now contains 159 beds. The practice of the hospital is open to practitioners and senior students, and clinical and pathological assistants are appointed in the wards and out-patient departments, as in the larger general hospitals.

Bethlem Royal Hospital.—Two resident house physicians who have recently obtained their diplomas to practise medicine and surgery, are elected every six months, and are provided with apartments, complete board, attendance, washing, and an honorarium of 25 guineas per quarter. The students of certain specified London medical schools receive clinical instruction in the wards of the hospital, and qualified practitioners may attend for a period of three months on payment of a fee.

National Hospital for Epilepsy and other Diseases of the Nervous System, Queen's Square, W.C.—Contains 200 beds. It has on its staff men of European reputation, and the institution is recognised by the Conjoint Board where part of the fifth year of study may be devoted to clinical work. Clinical clerks are appointed to the physicians for out-patients, and courses of lectures and clinical demonstrations are given each year.

Hospital for Consumption and Diseases of the Chest, Brompton.—The largest institution for the treatment of affections of the chest in the United Kingdom, there being 320 beds in the two buildings. There are four house physicians, who reside in the hospital, each for a period of six months. Lectures and demonstrations are given by members of the medical staff on Wednesdays and Fridays at four o'clock, save during the vacations. Terms, £3 3s. for three months; six months, £5 5s.; perpetual, £10 10s.

City of London Hospital for Diseases of the Chest, Victoria Park.—This is a large and well-equipped hospital at the East End, containing 164 beds. Clinical lectures and demonstrations are given by the members of an exceptionally experienced staff. Fee for three months' attendance on hospital practice, 2 guineas; six months, 3 guineas.

Throat and Ear Hospitals.

Central London Throat, Nose, and Ear Hospital, Gray's Inn Road, contains seventeen beds, with an extensive out-patient department recently enlarged. Clinical demonstrations and instruction to qualified practitioners and senior students daily during the hours of the surgeon's visits. Twelve clinical assistants who must be duly qualified are elected to assist the surgeons. Operation days—In-patients, Tuesdays, 2.15 p.m.; out-patients, Tuesdays and Fridays, 2 p.m. Fees for the three months' attendance, £3 3s.; six months', £5 5s. Full details of this institution will be found on reference to our advertising columns.

Hospital for Diseases of the Throat and Chest, Golden Square, W., with branches at Newington, Walworth and Notting Hill, contains 50 beds. Students are admitted to hospital practice on payment of fee of three months' course, £3 3s.; for six months, £5 5s.; perpetual, £7 7s.

Women and Children.

The Hospital for Women, Soho Square.—The hospital contains 61 beds. In connection with this institution there is now an organised school of gynæcology, open to qualified medical men and to students after their third year. Clinical assistants to the physicians and surgeons in the in-patient and out-patient departments are appointed every three months. Fee for the three months' course, £5 5s.

The Samaritan Free Hospital for Women and Children, Lower Seymour Street, W., offers excellent opportunities for clinical study and training in the details of operative gynæcology. The success of the staff in this department have gained for them an European reputation. There are 47 beds.

Hospital for Sick Children, Great Ormond Street, Queen's Square, and Cromwell House, Highgate.—Fee for three months' attendance, £2 2s.; perpetual, £3 3s. There are now 200 beds, besides 52 additional at the convalescent branch, and it is probably the largest institution of the kind in the world. The practice of the hospital has been thrown open gratuitously to pupils of the different hospitals and medical schools of London, on conditions to be ascertained from the secretary.

Eye Hospitals.

Royal London Ophthalmic Hospital, formerly in Moorfields, was rebuilt three years ago in the City Road, is the largest hospital devoted to this specialty in Great Britain, and contains 138 beds. Students and practitioners are admitted to the practice daily at 9 o'clock. Operations, 10 o'clock and after. Fee for six months, £3 3s.; perpetual, £5 5s. Further particulars of the secretary.

Royal Westminster Ophthalmic Hospital, King William Street, Charing Cross, has about 34 beds and a very large out-patient clinique. The lectures and demonstrations are arranged with special reference to the requirements of practitioners and senior students. Fee, six months, £3 3s.; perpetual, £5 5s.

Royal Eye Hospital, St. George's Circus, Southwark.—There are 40 beds and two cots. Fees, £2 2s. for three months, £3 3s. for six months, and £5 5s. perpetual. Courses are held on ophthalmoscopy, refraction, and diseases of the eye; fee, £1 1s. for each course, but perpetual students may attend each course once without extra fee. Pathology class, £1 1s. extra to cover cost of materials.

Skin Hospitals.

St. John's Hospital for Diseases of the Skin.—Out-patient department, 49, Leicester Square; In-patient department, 238, Uxbridge Road. This hospital has a well-equipped in-patient department, with 50 beds. There is a School of Dermatology in connection with the hospital, which is conducted by the medical staff of the hospital. A spacious laboratory is also provided. During the past year the free course of Chesterfield Lectures given by Dr. Morgan Dockrell has proved a great success, being well attended by the profession. The next course (free) will commence in October next, and the dates and times will be duly announced in our columns. (See advt.)

One of the oldest institutions of the kind is the Western Skin Hospital (Welbeck St., W.), which was started as long ago as 1851. The practice of the hospital is open to students and practitioners. Students of this specialty have also the "London Skin Hospital," in Fitzroy Square, with seven beds and an out-patient department of over 1,400. There is also the Stamford Street

Skin Hospital, in the southern part of the metropolis, with 10 beds and an out-patient department of 5,600, so that the students' needs in this direction are well catered for.

St. Peter's Hospital for Stone.—This is the only special hospital for the treatment of stone and genito-urinary diseases in the United Kingdom. It contains 27 beds and one private ward, and has an excellent record. Students are admitted on the usual terms.

London Temperance Hospital.—The hospital contains 110 beds. The medical and surgical practice is open to students and practitioners. Appointments (vacancies for which are advertised in the medical journals): Surgical and medical registrars, resident medical officer, and one assistant resident medical officer.

Metropolitan Hospital, Kingsland.—This was until recently known as the Metropolitan Free Hospital, is situated in the north-eastern district of the metropolis, and contains 160 beds. It is a general hospital, with various special departments for the treatment of diseases of the eye, throat, ear, &c.

Tottenham Hospital, N.—This hospital contains medical and surgical wards and a ward for children, having in all 73 beds. There are special departments for gynæcological cases, diseases of the eye, ear, throat and nose, and skin diseases. It has now been authorised by the University of London to give certificates of post-graduate study for the M.D. and M.S. degrees.

METROPOLITAN POST-GRADUATE INSTITUTIONS.

Medical Graduates' College and Polyclinic.—This institution, of which Sir William Broadbent is the President, affords to medical men special facilities for acquiring technical skill, and advancing their medical and scientific knowledge. The building, which is large and commodious, is situated at 22, Chenies Street, Gower Street, and contains lecture and consulting rooms, pathological and clinical laboratories, Röntgen ray room, an ophthalmoscope room, a library and museum, and reading and smoking rooms. *Cliniques*, at which patients are shown, are given every day of the week except Saturday, at 4 p.m. Clinical lectures are delivered on alternate Wednesdays at 5.15 p.m., and systematic lectures on special subjects are delivered twice a month on Monday and Friday evenings at 5.15 p.m. Four sessions of practical classes, each lasting six weeks, and a vacation session of three weeks' duration are held during the year; the subjects taught comprising ophthalmology, otology, clinical microscopy, laryngology, applied anatomy, nervous diseases, and practical X-ray work. There are, in addition, extra-mural classes in operative surgery, bacteriology, and public health.

A complimentary ticket for three days, admitting to *cliniques* and lectures, is issued to any medical practitioner on personal application at the college. A monthly journal, *The Polyclinic* recording the work done in the college, is issued free to subscribers and members. The annual subscription for practitioners residing in Great Britain and Ireland is one guinea, and for practitioners non-resident in the United Kingdom half-a-guinea.

Full information may be obtained from the medical superintendent, Mr. Hayward Pinch, F.R.C.S., at 22, Chenies Street, Gower Street.

West London Post-Graduate College.—The West London Hospital Post-Graduate College was started in 1895. The hospital, which contains 175 beds, is in the main road, within two minutes' walk of the Hammersmith Stations of the Metropolitan, the District, and the South-Western Railways. The physicians and surgeons attend daily, at 2.30 p.m. Post-graduates accompany the staff on their visits to the wards. Instruction is given in the out-patient department daily, at 2.15 p.m., by assistant physicians and assistant surgeons.

There are special departments for diseases of the eye; the ear, throat, and nose; the skin; for diseases of women; medical diseases of children; and for orthopædic surgery and X-ray work. Clinical assistants are appointed from among the post-graduates. Practical classes for instruction in these subjects are held each session. Operations are performed daily.

Instruction is given in the administration of anæsthetics by the anæsthetists on the operating days. Special classes are held each session.

Post-mortem examinations are performed at 5 p.m., and demonstrations on recent pathological specimens are given on Mondays and Fridays during each session, at 11 a.m., in the lecture room.

Practical lectures and demonstrations are given each afternoon (except Saturday), at 5 p.m., during the session.

Fees.—The fee for the hospital practice, including all the ordinary demonstrations and lectures, is £1 1s. for one week; £2 2s. for one month; £4 4s. for three months: £6 6s. for six months; £9 9s. for one year; and £21 for a life ticket; all fees to be paid in advance.

A course of attendance on either the medical or surgical practice alone may be taken out for the fee of £3 3s. for three months. The fee for three months' attendance in any one special department, other than medicine or surgery, is £2 2s.

All information can be obtained on application to the Dean at the West London Hospital.

North-East London Post-Graduate College.—At the Tottenham Hospital, N., facilities are afforded to qualified medical men for taking part in the work of an active general hospital, and for attending demonstrations of various branches of medicine, surgery, and gynæcology, with opportunities for clinical instruction, diseases of the eye, ear, throat, nose, diseases of the skin, and dentistry. Clinical lectures are given from time to time by members of the staff. Cases are demonstrated both in the wards and in the various out-patient departments; operations are performed every afternoon of the week, except Saturday. The fee for a three months' course of study, which may be begun at any time, in any single department, is one guinea. A fee of two guineas admits to the whole practice of the hospital for a similar term, and a perpetual ticket for the practice of the hospital may, for the present, be obtained on payment of a fee of three guineas. Additional information can be obtained from the Dean of the Post-Graduate College, Dr. A. J. Whiting, 142, Harley Street, W.

PROVINCIAL MEDICAL SCHOOLS.

Bristol University College.—Faculty of Medicine.—The lectures and instruction given in the Faculty of Arts and Science of University College, Bristol, are adapted to the various preliminary examinations, and students can complete in Bristol the entire course of study required for the medical and surgical degrees of the University of London and the Royal College of Surgeons of England, and of the Apothecaries' Society of London, and for the examination of the Army and Navy Boards. Students of the college are admitted to the clinical practice of those very important and well-equipped institutions, the Bristol Royal Infirmary and the Bristol General Hospital. The infirmary and the hospital comprise between them a total of 470 beds, and both have very extensive out-patient departments. Special departments for the diseases of women and children, and of the eye, ear, and throat, besides large outdoor maternity departments and dental departments. Students of the college also have the privilege of attending the practice of the Bristol Royal Hospital for Sick Children and Women, containing 104 beds, and that of the Bristol Eye Hospital, with 40 beds. The total number of beds available for clinical instruction is therefore 614. Very exceptional facilities are thus offered to students for obtaining a wide and thorough acquaintance with all branches of medical and surgical work.

Appointments.—At the Royal Infirmary, and also at the General Hospital, clinical clerks and dressers reside in the house in weekly rotation. A pathological clerk is appointed every three months. Also obstetric clerks and ophthalmic dressers. Clinical lectures are given regularly at both institutions.

Scholarships, Prizes, &c.—Prizes and certificates of honour are given in University College in all the subjects of the curriculum, open only to perpetual students. There are two entrance scholarships, value £50 and £30 respectively, two Martyrs' memorial scholarships (pathology and morbid anatomy) of £10 each, the Tibbit's memorial prize, value £9, for proficiency in practical surgery, one gold and silver medal awarded by the committee, and various prizes for clinical work in surgery and medicine.

Fees.—School fees for attendance on all courses of lectures, except comparative anatomy, 65 guineas, or 55 guineas. Dental composition fee, 55 guineas. Clinical fees—Surgical practice, one year, 12 guineas; perpetual, 20 guineas. Medical practice, 20 guineas; perpetual medical and surgery, 35 guineas; clerk or dresser, 5 guineas; obstetric clerk, 3 guineas.

Prospectus and further information on application to the Dean, Professor E. Markham Skerritt.

Bristol Royal Infirmary.—This is one of the largest provincial hospitals in Great Britain, and contains 270 beds. It is provided with all the necessary appliances for a complete clinical education. The resident appointments are five in number, the two juniors of which are each tenable for six months, and are intended for qualified students of the infirmary who have previously acted as medical and surgical registrars. Several scholarships and prizes are obtainable. Fees for admission to the medical practice, six months, seven guineas; twelve months, 12 guineas; perpetual, 20 guineas. The same fees are payable for surgical practice. Perpetual fee for medical and surgical practice, 35 guineas. Dental practice, one year, £7 7s.; perpetual, £12 12s.

Yorkshire College School of Medicine, Leeds.—This school was originally founded seventy years since as the Leeds Medical School, but it now forms the medical department of Yorkshire College, one of the constituent colleges of the Victoria University. The building, erected on a site contiguous to the infirmary, and opened five years ago, contains one of the finest dissecting rooms in the kingdom, extensive laboratories for physiology and pathology, with the most recent improvements in fittings and apparatus, ample lecture-room accommodation, a large library, and separate museums for pathology and anatomy. Professors and lecturers are attached, and the clinical teaching is given by the physicians and surgeons attached to the infirmary. Ophthalmic demonstrations and demonstrations of skin diseases are given in the infirmary by surgeons in each department, where also are obtainable various clinical clerkships, dresserships, and other appointments; and an extern maternity charity is attached, at which the necessary attendance at labours can be taken: besides the infirmary there are a large dispensary, a large hospital for infectious diseases, and a hospital for women and children, all of which are open to students of the school.

Students here have also excellent opportunities of acquiring a thorough insight into psychological medicine, as the renowned West Riding Lunatic Asylum is in connection, whereat lectures on mental diseases are delivered during the summer.

Scholarships, Prizes, &c.—(1) A Gilchrist scholarship of £50 a year for three years is awarded annually to the candidate who stands highest at the June Preliminary Examination at the Victoria University, provided he passes in the first division. (2) A university scholarship of £25 is awarded annually on the results of the second examination for the degree of M.B. and B.Ch., held in March. (3) An entrance scholarship of 64 guineas (covering composition fee for a full curriculum of lectures) is offered every September to university students. There are also a Hardwick prize in clinical medicine, a M'Gill prize in clinical surgery, each of the value of £10, and Thorpe prizes of £10 and £5 in forensic medicine and hygiene, and a Scattergood prize in midwifery, besides silver and gold medals and other class prizes. The composition fee for attendance upon all the required courses of school lectures is 64 guineas for university students who have attended the preliminary scientific courses, and the same for non-university students, exclusive of chemistry and biology.

At the General Infirmary, containing 447 beds, the perpetual fee for medical and surgical practice and clinical lectures is £42 in one sum, or two instalments of £22 each. These fees are not included in the composition fees for lectures, and are payable separately.

A scholarship of £42 to cover the cost of medical and surgical practice is also offered annually by the Infirmary.

University College, Liverpool (Victoria University).—Medical Faculty.—The new Dissecting Room is on the upper floor, and measures 70 by 40 feet, and the Anatomical Museum occupies the room below. It is provided with a gallery on each side, and the excellent series of models, dissections, and preparations can now be properly displayed for the use of students.

A new chair of Bio-Chemistry has been founded by the generosity of Mr. William Johnston.

Royal Infirmary.—The Royal Infirmary, which adjoins the school, contains 300 beds, with forty special beds for the treatment of diseases of women. The Lying-in, Eye and Ear, Women's, Children's, Dental, and Skin hospitals are in the immediate vicinity, and their practice is open to the students of the Medical Faculty.

Fees.—The composition fees are: £24 15s. for preliminary scientific classes; £60 for the medical classes required for the Victoria, London, and other University degrees; £70 for all the classes required for the diplomas of the Conjoint Boards. The medical composition fees are payable in two instalments, at intervals of twelve months. The fee for hospital attendance at the Royal Infirmary is 40 guineas, also payable in two annual instalments.

Appointments.—Three house surgeons, three house physicians, and one external house surgeon to the Thornton Wards are appointed for six months, after (if necessary) competitive examination. Clinical clerks for each physician, dressers for each surgeon, and clerks to the Thornton Wards for diseases of women, are appointed every three months. Post-mortem clerks are appointed for six weeks. All students are required to perform this duty before the schedule for the Final Examination is signed.

Fellowships, scholarships, and prizes to the value of over £700 are awarded annually, details whereof will be furnished on application to the Dean.

Entrance Scholarships.—Four Robert Gee entrance scholarships, of the value each of £25 for one year, are offered annually for competition. The holder is required to take out the science course for the University degree in Medicine. Communications should be addressed to the Dean, Professor Paterson, M.D., University College, Liverpool.

Manchester.—Owens College School of Medicine, Victoria University.—The medical school buildings, which include large laboratories, dissecting-rooms, library and reading-rooms, are on the most modern principles, and students wishing to engage in anatomical, physiological, or pathological research will find excellent opportunity for study in the complete and well-furnished laboratories. Hospital practice is taken out at the Royal Infirmary, which contains 300 beds. The Cheadle Lunatic Asylum, St. Mary's Hospital, the Southern Hospital, and other special hospitals also afford teaching facilities of great importance.

Appointments.—The following appointments are made in connection with the Manchester Royal Infirmary:—Surgical registrar, at £80 per annum: a pathological registrar, at £100 per annum; a medical registrar, at £70 per annum; two assistant medical officers, each at £80 per annum; a resident medical officer at the Convalescent Hospital, Cheadle, one year, £150 per annum, resident medical officer, one year, £150; resident surgical officer, one year, £150 per annum; two chloroformists, annually, at £50; two house surgeons and one house physician are appointed every three months for a term of six months; a resident assistant at the Convalescent Hospital, Cheadle, appointed every six months.

Scholarships.—Dalton entrance scholarships, £40 per annum for two years; Cartwright entrance scholarship, £35 per annum for three years; Hulme entrance scholarship, £35 per annum for three years; Rogers entrance scholarship, £40 per annum for two years; Seaton entrance scholarship, £40 per annum for two years; James Gaskill entrance scholarship, £40 per annum for two years; Kay Shuttleworth (Sir Jas. Philips) scholarship, £30 per annum for three years; Theodore's modern languages exhibition, £15; Honorary Research Fellowships; Manchester Grammar School scholarship, £18 per annum for three years; Turner scholarship of £20 to students who have completed four years of study in the College; Platt physiological scholarship, value £50, tenable for two years, open to students between the ages of 18 and 25; one Professor Tom Jones exhibition in anatomy of £25; one Professor Tom Jones memorial surgical scholarship of £100, awarded triennially; two Platt exhibitions, £15 each, for first and second year's students in physiology; Sidney Renshaw physiological exhibition, £15; Dumville surgical prize, £15, at the end of the winter session; two Dauntsey medical entrance scholarships, value £35, tenable for one year; John Henry Agnew scholarship in diseases of children, value about £30, awarded annually; Gilchrist scholarships of £50 per annum tenable for three years in any of the Colleges of the Victoria University, awarded to the candidate gaining the highest number of marks in the first division of the preliminary examination of the Victoria University: the Bradley memorial scholarship, £20, in clinical surgery is offered annually in the summer session to candidates who must be fourth year students; one medical and one surgical clinical prize are also offered annually.

Fees.—Composition fee, £70, in two sums of £35 each. Hospital practice: composition fee, £42, or two instalments of £22 each.

Dental Fees.—Composition fee, £50, payable in two sums of £25 each. Hospital practice, £21.

University of Durham College of Medicine, Newcastle-on-Tyne.—A very commodious and ornate new building has been erected here at a cost of about £31,000. The Royal Infirmary, at which clinical instruction is obtained, contains 280 beds. Pathological demonstrations are given as opportunity offers. Practical midwifery can be studied at the Newcastle Lying-in Hospital. Opportunities for practical study are also afforded by the Dispensary, City Infectious Diseases Hospital, Eye Infirmary, Children's Hospital and at the Northumberland County Lunatic Asylum.

Appointments.—Assistant demonstrators of anatomy receiving each an honorarium; prosectors for the professor of anatomy, assistant demonstrators of physiology and pathology, assistants to the dental surgeon, clinical clerks, and dressers are appointed at regular intervals. One year's attendance at the College is required on the part of candidates for the degrees in medicine of the University of Dublin.

Scholarships, &c.—University scholarships, value £100, for proficiency in arts, awarded annually at the beginning of winter session to full students in their first year only. The Dickinson memorial scholarship (value, the interest of £400 with a gold medal) for medicine, surgery, midwifery, and pathology, open to full students who have passed the primary examination of a licensing body. The Tulloch scholarship, interest of £400 annually, for anatomy, physiology, and chemistry. The Charlton memorial scholarship, interest of £700 annually, open to full students entered for the class of medicine at end of the fourth or fifth winter. The Gibb scholarship, interest of £500 annually, for pathology, at end of summer session. Goyder memorial scholarship in clinical medicine and clinical surgery, proceeds of £325 annually. The Luke Armstrong memorial scholarship, interest on £680. The Stephen Scott scholarship in surgery, interest on £1,000. The Heath scholarship in surgery (the next award will be in 1902); the interest on £4,000 is awarded every second year. The Gibson prize in midwifery and diseases of women and children; the interest on £225 is awarded yearly. At the end of each session a prize of books is awarded in each of the regular classes.

Fees.—(*a*) A composition ticket for lectures at the college may be obtained.—1. By payment of 70 guineas on entrance. 2. By payment of 45 guineas at the commencement of the first sessional year and 35 guineas at the commencement of the second sessional year. 3. By three annual instalments of 35, 30, and 20 guineas, respectively, at the commencement of the sessional year. (*b*) Fees for attendance on hospital practice: For three months' medical and hospital practice, five guineas; for six months, eight guineas; for one year, 12 guineas; perpetual, 25 guineas; or by three instalments at the commencement of the sessional year, viz., first year, 12 guineas; second year, 10 guineas; third year, six guineas; or by two instalments, viz., first year, 14 guineas; second year, 12 guineas.

Liverpool Dental Hospital and School of Dental Surgery.—The courses of systematic instruction are given in University College, five minutes' walk from the Dental Hospital. The two institutions are now closely associated, and the management of the curriculum is in the hands of a joint committee.

The staff of the Dental Hospital includes seven honorary dental surgeons, a demonstrator, two house surgeons, and a curator. Fees for two years' hospital practice, £21. Apprenticeship: A limited number of apprentices are admitted annually; fees for three years, £105. Further information may be had from the Warden, Mr. W. H. Gilmour. The various medical and dental lectures are given at University College.

Fees.—The composition fee for all lectures is £50, in one payment on entrance, or in two equal instalments (one half on entrance, and the remainder within twelve months). The fee for general hospital practice is £10 10s.

The winter session will begin on Wednesday, October 1st. Prospectuses and further information may be had on application to the Secretary, University College, Liverpool. (See also under "English Universities.")

Sheffield University College Medical Department.—The medical department contains a medical library, good class-rooms, an excellent anatomical department, and every provision for medical education under the most modern principles. The physiological department has been entirely reconstructed and equipped in memory of the late president of the school, Mr. Wm. F. Favell, through the generosity of anonymous donors. The department consists of a lecture and demonstration theatre, students' laboratory, preparing room and galvanometer room, all of which are equipped with the most modern apparatus. New premises have been acquired near the College for the pathological museum and laboratory, and also for a bacteriological laboratory, which has been completely equipped through the generosity of "A Sheffield Citizen." The course of lectures and instruction is adapted to meet the requirements of the various examining bodies. Full courses of instruction required for the D.P.H. are given. The new dental department has been recognised by the examining bodies. Students at this college obtain medical and surgical practice at the Royal Infirmary, a well-appointed institution, containing 247 beds, and also at the Sheffield Royal Hospital, containing 160 beds. The fees for attendance, £6 6s. each for medical and surgical practice during the winter session, and for three months £3 3s. each. Perpetual fee for medical and surgical hospital practice in a single payment of £45, or in two payments, viz., £26 on entrance, and £22 within twelve months afterwards. Students are also admitted to the practice of the Jessop Hospital for Diseases of Women, to the City Fever Hospitals, and to the South Yorkshire Lunatic Asylum at Wadsley. The winter session will commence on October 1st, when the introductory address will be delivered by Sir H. G. Howse.

Scholarships, &c.—An entrance scholarship of the value of £110 is annually awarded to the best candidate (if of sufficient merit) in mathematics, elementary physics, inorganic chemistry, Latin, English.

Composition fee, 60 guineas, or in two instalments of 35 guineas and 30 guineas, for lectures and practical classes required by the Examining Board in England.

The Kaye scholarship, for second year's students, natives of Sheffield, is awarded annually, under certain regulations. Prizes for clinical medicine and clinical surgery of 10 guineas; Simon prize in pathology, £10; prizes in books and certificates awarded annually.

University College, Cardiff, School of Medicine.—This college, which is one of the colleges of the University of Wales, has since its foundation, in 1883, prepared students for the Preliminary Scientific examination of the University of London, and for the corresponding examinations of other licensing bodies. In 1893 Chairs of Anatomy and Physiology and a Lectureship in Materia Medica and Pharmacy were established, making it possible for students of medicine to spend three out of the five years of prescribed study at Cardiff. Arrangements with the managing committee of the Cardiff Infirmary give students of the College the privilege of attending this large and well-ordered hospital, which is situated within five minutes' walk of University College. Many students, especially from Wales and Monmouthshire, avail themselves of the opportunities thus afforded to pursue the earlier part of the medical curriculum near home. All classes are open alike to both men and women students over sixteen years of age. The courses of instruction given at Cardiff are recognised as qualifying for the examinations of the universities, Royal colleges, and other licensing bodies of Great Britain and Ireland. Having spent two or three years in study at Cardiff, and having passed the corresponding examinations, a student may proceed to London or elsewhere and complete his qualifying course for a university degree or for a college diploma.

Students preparing for the first and second examinations of the Conjoint Board for England or for the corresponding examinations of the Conjoint Board for Scotland, or for those of the Society of Apothecaries, may compound for their classes by paying a single composition fee of £40, or by paying £18 10s. and £24 10s. at the beginning of their first and second years respectively.

Those preparing for the preliminary scientific and intermediate examination in medicine of the University of London may compound for their three years' instruction at Cardiff by paying a single composition fee of £57 10s., or by paying £13 13s., £28, and £21 at the beginning of their first, second and third years respectively.

In 1899 a department of Public Health was established, and lecturers in bacteriology and in public health and hygiene were appointed. Medical men preparing for a diploma in Public Health and Hygiene can attend complete courses of lectures and laboratory instruction in this department. These courses are recognised by the University of Cambridge, by the Royal Colleges of Physicians and Surgeons, and by Victoria University.

Scholarships, &c.—The attention of students about to matriculate is drawn to the numerous entrance scholarships for exhibitions which are offered at the college for competition in September, most of which may be held by medical students. Full particulars of the examination for these may be obtained from the Registrar.

LIVERPOOL ROYAL SOUTHERN HOSPITAL.—The clinical school of this hospital is situated within convenient distance of the school of medicine, and affords every facility for clinical and pathological study. The hospital contains 200 beds, and in addition to the general medical and surgical cases attention is devoted to the diseases of women and children. There is a special ward for tropical diseases in connection with the University College laboratories.

The medical and surgical staff visit the wards daily, and the ward instruction is supplemented by weekly clinical lectures. Additions have been made to the teaching staff so that students may now obtain instruction in diseases of the eye, ear and throat. Demonstrations in the use of the X-ray apparatus are given at intervals. There is an excellent pathological department, with laboratory attached, where demonstrations are arranged for and regular instruction is given in practical pathology. The practice of St. George's Hospital for Diseases of the Skin is free to students, and thus ample opportunity is afforded for acquiring a knowledge of dermatology. In addition to the clinical clerkships which are allotted to the students the resident posts of ambulance officers are given to the students whom the board may think most suited to hold them every three months. The Alexander Fellowship in Pathology of £100 a year is open to students of this school; three prizes of £5 each are also awarded to the gentlemen who present the best taken series of medical and surgical cases. Fees: Perpetual, £26 5s.; one year, £10 10s.; six months, £7 7s.; three months, £4 4s.

There are rooms for a limited number of resident students; terms (exclusive of fee for hospital practice), £15 15s. per quarter. The practice of the hospital is recognised by all examining bodies.

THE LIVERPOOL SCHOOL OF TROPICAL MEDICINE.—This school was established in Liverpool in 1899. Sir Alfred Jones, K.C.M.G., is Chairman. It is in conjunction with the University College, Liverpool, and the Royal Southern Hospital, for the purposes of research and clinical teaching respectively. A special ward at the hospital has been set apart for the reception and treatment of tropical diseases, and all facilities for investigation and study are given in the Pathological Department of University College (Thompson Yates Laboratories).

Major Donald Ross, C.B., F.R.S., F.R.C.S., is the Walter Myers Lecturer in Tropical Medicine and Consulting Physician in Tropical Diseases at the hospital; Dr. H. E. Annet, Demonstrator in Tropical Medicine to the school; and Dr. R. Fielding Ould, Dr. A. S. Grunbaum, and Dr. Balfour Stewart, Assistant Lecturers. Dr. J. E. Dutton holds the Walter Myers Fellowship of Tropical Medicine. Mr. A. H. Milne, B.A., is the Honorary Secretary. Address, Chamber of Commerce, Liverpool.

The following are the principal provincial hospitals having the greatest number of beds, to which students are admitted where clinical instruction can be obtained, but to which there is no medical school attached:—

BATH ROYAL UNITED HOSPITAL.—This is a well-appointed hospital in the West of England, with 130 beds, at which students can obtain clinical instruction. The hospital is recognised by the Colleges, and is licensed for dissection. It contains also an excellent museum and library. Fee for six months' attendance, five guineas; twelve months' ten guineas.

BRADFORD INFIRMARY.—The hospital contains 230 beds. Non-resident pupils are received—and abundance of clinical material is obtainable. One year's attendance is recognised by the Examining Boards. Fee, perpetual, £10 10s.

BRIGHTON SUSSEX COUNTY HOSPITAL contains 190 beds. It is recognised by the College of Surgeons and by the Conjoint Board. Out-pupils are admitted to the clinical teaching and the classes at a fee of £21 for two years.

LIVERPOOL NORTHERN HOSPITAL, contains 155 beds. Clinical instruction is given by the staff during the summer and winter sessions. Clinical clerkships and dresserships are open to all students without additional fees. Fees for hospital attendance: Perpetual, £26 5s.; one year, £10 10s.; six months, £7 7s.; three months, £4 4s.; practical pharmacy, £2 2s.

NORFOLK AND NORWICH HOSPITAL.—This hospital is recognised by the Colleges, and contains 220 beds. Fees, £10 10s. for six months, £15 15s. for twelve months' medical and surgical practice. Pupils, resident and non-resident, are admitted.

NORTHAMPTON GENERAL INFIRMARY.—The number of beds is 163. Out-pupils are received, and have every opportunity of acquiring a practical knowledge of their profession. Instruction is also given in anatomy and materia medica and practical pharmacy. Non-resident pupils are taken at a fee of £10 10s.

ROYAL BERKSHIRE HOSPITAL.—The town of Reading, at which this hospital is situated, has a very large working-class population, and excellent opportunities for clinical instruction in the wards and extensive out-patient department are afforded here. It contains a splendid library, in which the Reading Pathological Society holds its meetings.

THE ROYAL HOSPITAL, Portsmouth.—The hospital is a preparatory school of medicine and surgery, and the attendance of pupils is recognised by the Examining Boards. The number of beds is 150, and during last year there were 1,303 in-patients and 9,191 out-patients.

Royal Devon and Exeter Hospital, Exeter.—The hospital contains 218 beds (including special children's wards), and has a good library, museum, dissecting room, and post-mortem room. Attendance on the practice of this hospital qualifies for all the Examining Boards. Arrangements can be made by which students can attend midwifery on application to the House Surgeon.

Wolverhampton General Hospital.—The hospital contains 230 beds, attendance at this hospital being recognised by all the Examining Boards. Pupils are trained in clinical work by the medical and surgical staff. Fees: Six months, £6 6s.; twelve months, £12 12s.; perpetual, £21.

THE ENGLISH UNIVERSITIES.

The English Universities are six in number, viz., Oxford, Cambridge, London, the Victoria, Durham, and the recently created University of Birmingham. The choice of a university is usually determined by social, geographical, and financial considerations. Evidently students whose parents are able and willing to incur the necessary expense would do well to select one or other of the ancient universities, since their degrees confer upon their holders a status not accorded by the public to the degrees of more modern educational institutions. To those less favoured by fortune, but blessed with energy and a fair share of intelligence, the London University offers ample scope, and its degrees are recognised as the outward and visible sign of high professional attainments. The Victoria University comprises Owens College, Manchester, University College, Liverpool, and the Yorkshire College, at Leeds. It thus covers a wide area and attracts considerable numbers of students whose aim is the possession of a degree in medicine.

OXFORD.

There are two degrees in medicine, M.B. and M.D., and two degrees in surgery, B.Ch. and M.Ch. The M.B. and B.Ch. degrees are granted to those members of the University who have passed the second examination. Graduates in Arts, B.A., are alone eligible for these two degrees. In order to obtain the degree of M.B. and B.Ch., the following examinations must be passed:—1. Preliminary subjects: Mechanics and physics, chemistry, animal morphology and botany. 2. Professional (*a*) First Examination (held twice a year): Subjects: Organic chemistry, unless the candidate has obtained a first or second class in chemistry in the Natural Science School; Human physiology, unless he has obtained a first or second class in animal physiology in the Natural Science School; Human anatomy and Materia medica with Pharmacy. (*b*) Second Examination: Subjects: Medicine, Surgery, Midwifery, Pathology, Forensic medicine with Hygiene. The approximate dates of the examinations are as follows.—Preliminaries — Mechanics, physics, and chemistry, December and June; Animal morphology and botany, December and March; Professional (First and Second M.B.), June and December.

The degree of M.D. is granted to Bachelors of Medicine of the University who have entered on their thirty-ninth term on their presenting a dissertation approved by the appointed professors and examiners.

The degree of M.Ch. is granted to Bachelors of Surgery of the University who have entered their twenty-seventh term, who are members of the surgical staff of a recognised hospital, or have acted as dresser or house surgeon in such a hospital for six months, and who have passed an examination in surgery, surgical anatomy, and surgical operations. This examination is held annually, in June, at the end of the Second M.B. Examination.

The First Examination for the degrees of M.B. and B.Ch. may be passed as soon as the Preliminary Scientific examinations have been completed. The subjects of this examination may be presented separately or in any combination or in any order, provided anatomy and physiology be passed together.

The Second Examination may be passed at any time after the completion of the first. The subjects of medicine, surgery, and midwifery must be passed at the same examination, but candidates are allowed to present themselves in pathology at a separate examination.

Diploma in Public Health.—An examination is held yearly in Michaelmas Term, open to all registered medical practitioners. No one is admitted as a candidate unless his name has been on the "Medical Register" for twelve months.

Scholarships, &c.—Scholarships in some branch of Natural science (chemistry, physics, biology) of the average value of £80 per annum, tenable for four years and renewable under certain conditions for a fifth year, as well as exhibitions of less annual value, are awarded after competitive examinations every year by some of the Colleges. Notices of vacancy, &c., are published in the "University Gazette." In February there is competed for annually, by those who, having obtained a first-class in any school (moderations or final), or a scholarship or prize open to general competition in the University, have passed all the examinations for the degree of B.A. A Radcliffe Travelling Fellowship is tenable for three years, of the annual value of £200. The examination is partly scientific, partly medical. A Rolleston Memorial prize is awarded once in two years to members of the Universities of Oxford and Cambridge of not more than ten years' standing for an original research in some biological subject including physiology or pathology.

More detailed information may be obtained from the University Calendar and from the Registrar.

CAMBRIDGE.

At the University of Cambridge five years of medical study are required for the M.B. and B.C. degrees. The candidate must have resided nine terms (three years) in the university, and have passed the "previous" examination in classics and mathematics. There are three examinations: the first in chemistry, physics, and biology; the second in human anatomy, physiology, and (2) pharmaceutical chemistry; and the third, in the usual practical subjects with hygiene and pathology; each examination is divided into two parts, which can be taken separately. Subsequently to the third examination an Act has to be kept, which consists in reading an original thesis, followed by an oral examination on the subject of the thesis. As the subjects for the examination for the degree in surgery are included in the third examination for the M.B. degree, candidates are admitted to the degree of Bachelor of Surgery on passing the third examination for Bachelor of Medicine.

The M.D. degree may be taken three years after the M.B. An Act has to be kept, with oral examinations and an essay to be written extempore. There is also the degree of Master of Surgery, for which the candidate, having already passed for B.C., or being M.A., has otherwise qualified in surgery, has to pursue extra study in surgery, and has a special examination or submit original contributions of merit to the science or art of surgery. The yearly expenditure of a student who keeps his term by a residence in a college is from £150 to £200 a year. This, however, may include all payments to the University and the College—all fees as well as clothes, pocket money, travelling expenses, &c. Non-collegiate students have only to pay the University fees, which are not large. They lodge and board as they like; their expenses, therefore, are entirely in their own hands.

The University degree grants a diploma in public health without the necessity of residence, the examination being in so much of State medicine as is comprised in the functions of officers of health, and subject to the latest requirements of the General Medical Council. These examinations are held in Cambridge the first week in April and October. Candidates, whose names must be on the Medical Register of the United Kingdom, and need not be members of the University, should send in their applications to the Secretary of the State Medicine Syndicate a fortnight in advance. Every candidate who has passed both parts of the examination to the satisfaction of the examiners will receive a testimonial testifying to his competent knowledge of the subjects comprised in the duties of a medical officer of health.

An abstract of all Regulations may be obtained upon sending a stamped directed envelope to the Assistant Registrary, Cambridge. Full information is contained in the University Calendar.

UNIVERSITY OF LONDON.

The Matriculation Examination.—Candidates for any degree in this University *must* have passed the matriculation examination. It is held twice in each year—on the second Monday in January and the second Monday in June; not only at the University of London, but also, under special arrangement, in other parts of the United Kingdom and in the colonies.

The Preliminary Scientific M.B. Examination.—Professional studies pursued before the whole of this examination has been passed will not count towards the course required for the M.B. degree. The subjects are (*a*) chemistry and physics, (*b*) general biology. The examination takes place twice in each year, once for Pass and Honours, commencing on the third Monday in July, and once for Pass candidates only, commencing on the third Monday in January.

Intermediate Examination.—The Intermediate Examination in Medicine takes place twice in each year—once for Pass and Honours, commencing on the second Monday in July, and once for Pass candidates only, commencing on the third Monday in January. The subjects of the examination are anatomy, physiology and histology, organic chemistry, materia medica, and pharmaceutical chemistry. No candidate shall be admitted to this examination until nineteen years of age, and unless he has passed the Preliminary Scientific Examination at least two years previously. Fee for this examination, £5.

M.B. Examination.—This examination is held for Pass and Honours in October, and for Pass only in May. The candidate must have passed the Intermediate Examination at least twenty-one months earlier, must have attended lectures and hospital practice in a recognised medical school for two years, including at least two months' attendance on lunacy and infectious diseases, one of which must be subsequent to the Intermediate Examination, must have conducted at least twenty labours, and have acquired proficiency in vaccination.

Bachelor of Surgery.—The examination for the degree of Bachelor of Surgery takes place once in each year, in December. Candidates must produce certificates to the following effect:—1. Of having passed the examination for the degree of Bachelor of Medicine in this University. 2. Of having attended a course of instruction in operative surgery, and of having operated on the dead subject. The subjects of the examination are surgery (including operations on the dead body), pathology, and surgical anatomy. Fee, £5.

Master in Surgery.—The examination for the degree of Master in Surgery takes place once in each year, in December. Candidates must be bachelors of surgery of at least two years' standing; one year is, however, remitted in the case of candidates who passed the B.S. examination in the first division. The examination comprises mental physiology, surgery, and surgical anatomy.

Degree of Doctor of Medicine.—The degree of Doctor of Medicine is granted after examination to bachelors of medicine of at least two years' standing (reduced to one year if the candidate passed the preliminary examination in the first division). The examination comprises mental physiology and medicine, and is conducted by written papers, clinical examination, and *viva voce*. A candidate who presents a thesis approved by the examiners is excused the written examination.

Degree of Doctor in State Medicine.—This degree is granted to bachelors of medicine after examination on producing evidence (1) of having been engaged in the study of State Medicine for at least two years, (2) of having studied State Medicine for *one* year and of having held the post of Medical Officer of Health for two years, (3) of having held the post of Medical Officer of Health for *three* years. The examination is the same as for the ordinary M.D., with the exception that State Medicine takes the place of medicine.

Prizes.—1. The Sherbrooke Prize is awarded triennially for the best essay, embodying original research in some branch of science.

2. The Granville Prize is awarded in each of the two years intervening between the several awards of the Sherbrooke Prize.

Exhibitions or scholarships are awarded to the first six candidates in honours at the matriculation examination, and, if thought proper, to the first candidate in honours at the other examinations.

UNIVERSITY OF DURHAM.

One diploma and six degrees in Medicine and Hygiene are conferred, viz., the degrees of Bachelor in Medicine, Bachelor in Surgery, Master in Surgery, Doctor in Medicine, Bachelor in Hygiene, and Doctor in Hygiene, and Diploma in Public Health. These degrees are open to both men and women.

For the degree of Bachelor in Medicine (M.B.) there are four professional examinations. The subjects for the first are: Elementary anatomy and elementary biology, chemistry, and physics. For the second: Anatomy, physiology, materia medica, therapeutics, and pharmacology. For the third: Pathology, medical jurisprudence, public health, and elementary bacteriology; and for the fourth: Medicine, clinical medicine, and psychological medicine, surgery, and clinical surgery, midwifery, and diseases of women and children.

It is required that one of the five years of professional education shall be spent in attendance at the University College of Medicine, and the Royal Infirmary, Newcastle-upon-Tyne.

Candidates who have passed the First and Second Examinations of the University will be exempt from the First and Second Examination of the Conjoint Board.

For the degree of Bachelor in Surgery (B.S.) every candidate must have passed the examination for the degree of Bachelor of Medicine of the University of Durham, and must have attended one course of lectures on operative surgery, and one course on regional anatomy. Candidates will be required to perform operations on the dead body, and to give proof of practical knowledge of the use of surgical instruments and appliances.

For the degree of Master in Surgery (M.S.) candidates must not be less than twenty-four years of age, and must satisfy the University as to their knowledge of Greek. In case they shall not have passed in this subject at the Preliminary Examination in Arts for the M.B. degree, they must present themselves at Durham for examination in it at one of the ordinary examinations held for this purpose before they can proceed to the higher degree of M.S. They must also have obtained the degree of Bachelor in Surgery of the University of Durham, and must have been engaged for at least two years, subsequently to the date of acquirement of the degree of bachelor in surgery, in attendance on the practice of a recognised hospital, or in the naval or military service, or in medical or surgical practice.

For the degree of Doctor in Medicine (M.D.) candidates must be of not less than twenty-four years of age, and must satisfy the University as to their knowledge of Greek. In case they shall not have passed in this subject at the Preliminary examination in Arts for the M.B. degree, they must present themselves at Durham for examination in it at one of the ordinary examinations held for this purpose before they proceed to the higher degree of M.D. They must also have obtained the degree of Bachelor in Medicine of the University of Durham, and must have been engaged for at least two years, subsequently to the date of acquirement of the degree of Bachelor of Medicine, in attendance on the practice of a recognised hospital or in the military or naval services, or in medical and surgical practice.

Each candidate must prepare an essay, which must be type written, based on original research or observation, on some medical subject selected by himself, and approved by the Professor of Medicine, and must pass an examination thereon, and must be prepared to answer questions on the other subjects of his curriculum so far as they are related to the subjects of the essay.

For regulations for degrees in Hygiene and for the diploma in Public Health see Calendar 1901-2.

Candidates for any of the above degrees must give at least twenty-eight days' notice to the Secretary of the College of Medicine, Newcastle-on-Tyne.

Residence can be had in a separate hostel for female students at moderate inclusive fees for board, &c., particulars of which and any other college information will be given on application to Prof. Howden, Secretary, University of Durham College of Medicine, Newcastle-on-Tyne.

VICTORIA UNIVERSITY.

Colleges of the University: Owens College, Manchester; University College, Liverpool; and Yorkshire College, Leeds. Candidates for degrees in medicine and surgery must attend, during at least two years, classes in one of the colleges of the University.

The degrees in the Faculty of Medicine are Bachelor of Medicine (M.B.), Bachelor of Surgery (Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M). All candidates for degrees in medicine and surgery are required to pass the Preliminary Examination, or to have passed such other examination as may from time to time be recognised for this purpose by the University.

The subjects of the Preliminary Examination are—1, Latin; 2, Elementary Mathematics; 3, Elementary Mechanics; 4, English; 5, one of the following:—(*a*) French; (*b*) German; (*c*) Greek; (*d*) Italian; (*e*) Spanish; (*f*) any other modern language, permission to present which has been obtained from the Board of Studies. Notice of intention to present either Italian or Spanish must be given before March 1st in each year.

Before admission to the degrees of Bachelor of Medicine and Surgery candidates are required to send in the usual certificates of age and study as at the other Universities.

All candidates for these degrees must pass three examinations, namely—the First examination; the Second examination; and the Final examination.

First Examination.—The subjects of the examination are, 1, Chemistry; 2, Elementary Biology; 3, Physics.

Candidates must have attended, during at least one year, courses of both lectures and laboratory work in each of the above-named subjects.

Second.—1, Anatomy, 2, Physiology (including physiological chemistry and histology); materia medica and pharmacy.

Candidates must have passed the First Examination, and have attended courses of instruction in anatomy (systematic and practical) during two winter sessions and one summer session, in physiology for *two* winter sessions, in materia medica and pharmacy for *one* summer session. Candidates may present themselves separately in (*a*) anatomy and physiology, (*b*) materia medica and pharmacy.

Final.—The examination is divided into two parts, which may be passed separately or on the same occasion, but the first part cannot be taken before the end of the third year, and the second part cannot be taken less than two years after passing Second M.B. or before the fifth year of medical study in accordance with the University regulations. The subjects of examination are as follows: 1, Pharmacology and therapeutics; 2, General pathology and morbid anatomy; 3, Forensic medicine and toxicology and public health; 4, Obstetrics and diseases of women; 5, Surgery, systematic, clinical, and practical; 6, Medicine, systematic and clinical, including mental diseases and diseases of children. Candidates may select as a first part of the examination two or three of the subjects 1, 2, and 3.

The certificates required from candidates at the final examination are practically the same as for the corresponding examination at the London University, and only those who have previously passed the second examination are admitted to it. The regulations relating to the M.D. and Ch.M. degrees can be obtained on application to the Registrar.

Fees.—Preliminary examination, £2; for any subsequent examination, £1. First examination, £5; for any subsequent examination, £2. The fees for the second examination, for the final examination, and for the examination for the degree of Ch.M. are the same as for the first examination. A fee of £10 is payable on the conferring of the degree of M.D., a fee of £4 on the conferring of the degree of Ch.M.

The Preliminary examination is held in June and about the end of September. The first M.B. and Ch.B. is held in June; also about the end of September. The second and final examinations are held in March and July, the examination for Ch.M. in July only.

UNIVERSITY OF BIRMINGHAM.

The University of Birmingham grants degrees of M.B., Ch.B., M.D., Ch.M., and also a B.Sc. in the subject of public health. In order to obtain any of these degrees it is necessary that a student shall have passed at least the first four years of his curriculum in attendance upon the classes of the university.

Degrees of Bachelor of Medicine and Bachelor of Surgery.—The student must have passed either the matriculation examination of the university or one of the following examinations, which will be accepted in lieu thereof for the present:—(*a*) The previous examination of the University of Cambridge. (*b*) Responsions of the University of Oxford. (*c*) The matriculation examination of any other university in the United Kingdom. (*d*) The leaving certificate (higher) of the Oxford and Cambridge Boards. (*e*) The Oxford or Cambridge junior local examinations (first or second class honours). (*f*) The Oxford or Cambridge senior local examination (honours). (*g*) The College of Preceptors examination for first-class certificate.

Matriculation examinations are held in June and September each year.

Degrees of Doctor of Medicine and Master of Surgery.—Candidates for either of these degrees will be required either—(*a*) To present a thesis embodying original observations in some subject embraced in the medical curriculum and approved by a Board of Medical Examiners; or (*b*) to pass a general examination (written and practical) in medicine or surgery, according to the degree desired. The University also grants degrees in public health, for which ample provision has been made.

Dental Department.—The University grants the Degrees of Bachelor and Master of Dental Surgery (B.D.S. and M.D.S.).

The General and Queen's Hospitals.—The practices of these hospitals are amalgamated for the purpose of clinical instruction under the direction of the Birmingham Clinical Board, by whom all schedules will be signed and all examinations conducted. The hospitals have a total of upwards of 400 beds. 6,000 in-patients and 80,000 out-patients are treated annually, and many valuable posts are open to students at both.

Further information can be obtained from Professor Windle, Dean, Medical Faculty.

THE ENGLISH COLLEGES.

The medical corporations in England are the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Society of Apothecaries of London. The two Royal Colleges now co-operate to hold a series of examinations, on passing which the candidate receives the diploma of Licentiate of the Royal College of Physicians (L.R.C.P.), and Member of the Royal College of Surgeons (M.R.C.S.). The Society of Apothecaries grants a complete diploma in medicine, surgery, and midwifery.

Conjoint Examining Board in England (Royal College of Physicians of London and the Royal College of Surgeons of England).

Candidates for the above licences are required to complete five years of professional study at recognised medical schools and hospitals, after passing the preliminary examination, of which six months may be spent at an institution recognised by the Board for instruction in chemistry, or one year may be passed at an institution recognised by the Board for instruction in chemistry and biology, to comply with the following regulations and to pass the examinations hereinafter set forth.

Professional Examinations.—There are three examinations, each being partly written, partly oral, and partly practical. These examinations will be held in the months of January, April, July, and October, unless otherwise appointed. Every candidate intending to present himself for examination is required to give notice in writing to the Secretary of the Examining Board, Examination Hall, Victoria Embankment, W.C., fourteen clear days before the day on which the examination commences, transmitting at the same time the required certificates.

The subjects of the first professional examination are —Chemistry and physics, practical pharmacy, and elementary biology. A candidate may, if he so desire, take this examination in three parts at different times. A candidate will be admitted to examination in chemistry and physics and elementary biology before registration as a medical student by the General Medical Council, and he may take pharmacy at any time during the curriculum. Rejection entails a delay of not less than three months from the date of rejection, and the candidate will be re-examined in the subject or subjects in which he has been rejected. If referred in chemistry or biology, he must produce evidence of further instruction at a recognised institution. Practical pharmacy may be passed at any time during the curriculum. Any candidate who shall produce satisfactory evidence of having passed an examination for a degree in medicine on any of the subjects of this examination conducted at a university in the United Kingdom, India, or in a British colony, will be exempt from examination in those subjects in which he has passed.

The fees for admission to the first examination are as follows:—For the whole examination, £10 10s.; for re-examination after rejection in Part I., £3 3s.; and for re-examination in each of the other parts, £2 2s.

The subjects of the second examination are anatomy and physiology. Candidates will be required to pass in both subjects at one and the same time. Candidates will be admissible to the second examination at the expiration of two winter sessions and one summer session (or fifteen months during the ordinary sessions) from the date of registration as medical students, and after the lapse of not less than nine months from the date of passing Parts I. and III. of the first examination.

A candidate referred at the second examination will be required, before being admitted to re-examination, to produce a certificate that he has pursued, to the satisfaction of his teachers, in a recognised place of study, his anatomical and physiological studies during a period of not less than three months subsequently to the date of his reference.

The fees for admission to the second examinations are: £10 10s. for the whole examination, and £6 6s. for re-examination after rejection.

The subjects of the third and final examinations are:—Part I. Medicine, including medical anatomy, pathology, practical pharmacy, therapeutics, forensic medicine, and public health. Candidates who have passed in practical pharmacy at the first examination will not be re-examined in that subject at the third examination. Part II. Surgery, including pathology, surgical anatomy, and the use of surgical appliances. Part III. Midwifery and gynæcology. Candidates may take this examination in three parts separately, or they may present themselves for the whole examination at one time.

Fees for admission to the third or final examination are as follows:—For the whole examination, £15 15s. Part I.—For re-examination in medicine, including medical anatomy, pathology, therapeutics, forensic medicine, and public health, £5 5s.; for re-examination in practical pharmacy (if taken at this examination), £2 2s. Part II.—For re-examination in surgery, including pathology, surgical anatomy, and the use of surgical appliances, £5 5s. Part III.—For re-examination in midwifery and gynæcology, £3 3s.

A candidate referred on the third or final examination will not be admitted to re-examination until after the lapse of a period of no less than three months from the date of rejection, and will be required, before being admitted to re-examination, to produce a certificate, in regard to medicine and surgery, of having attended the medical and surgical practice, or the medical or surgical practice, as the case may be, during the period of his reference; and in regard to midwifery and diseases peculiar to women a certificate of having received, subsequently to the date of his reference, not less than three months' instruction in that subject by a recognised teacher.

REGULATIONS FOR COLONIAL, INDIAN, AND FOREIGN CANDIDATES, AND UNIVERSITY CANDIDATES.

Persons holding a Colonial, Indian, or a foreign qualification entitling them to practise medicine in the country of origin, and conferred after a course of study and examinations equivalent to those required by the Royal Colleges, are admissible to the second and third (final) examinations forthwith.

Members of an University in the United Kingdom are, under certain conditions, eligible for admission to the third (final) examination two years after passing at their University in the subjects included in the first and second examinations of the Board.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

Licentiates.—Candidates are now subject to the regulations of the Conjoint Examining Board in England.

The following by-laws, amended in conformity with the revised regulations of the Conjoint Examining Board, were re-enacted as follows:—

"Every candidate for the college licence (unless specially exempted) shall be required to produce satisfactory evidence of having passed before the commencement of professional study a preliminary examination on subjects of general education recognised by the college.

"Every candidate shall be required to produce satisfactory evidence of having completed five years of professional study, after passing a recognised preliminary examination before admission to the final examination.

"A candidate shall not be admitted to the second examination until the completion of two winter sessions and one summer session (or 15 months during the ordinary sessions) at a recognised medical school, nor until the expiration of one winter and one summer session after passing Parts I. and III. of the first examination.

"A candidate shall not be admitted to the third (or final) examination till the expiration of five winter and five summer sessions from the date of passing the preliminary examination and of four winter and four summer sessions after passing Parts I. and III. of the first examination, and of two winter and two summer sessions after passing the second examination."

Members.—The membership of the college is granted after examination to persons above the age of 25 years who do not engage in trade, do not dispense medicine, and do not practise in partnership. This diploma is only granted to persons already registered, or who have passed the final examination for the licence.

Medical graduates of a recognised university are admitted to a pass examination, but others must have passed the examinations required for the licence of the college. The examination, which is held in January, April, July, and October, is partly written and partly oral. It is directed to medicine, and is conducted by the president and censors. Candidates under 40, unless they have obtained a degree in arts in a British university, are examined in Latin, and either Greek, French, or German. Candidates over 40 are not so examined, and the examination in medicine may in their case be modified under conditions to be ascertained by application to the Registrar. The fee for the membership is £42, but if the candidate is a licentiate £15 5s. is deducted. In either case £6 6s. has to be paid before examination.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

MEMBERSHIP.—The candidates are now subject to the regulations of the Conjoint Board.

Fellowship.—The Fellowship of the College of Surgeons is granted after examination to persons at least 25 years of age, who have been engaged in professional studies for six years. There are two examinations—the first in anatomy and physiology, which may be passed after the third winter session; the second chiefly directed to surgery, which may be passed after six years of professional study. The second examination may be passed before attaining the age of 25, but the diploma is not granted until that age is reached. Candidates for this part of the examination must have passed the final examination of the Conjoint Board in England, and have been admitted members of the college before they can be admitted thereto, except in the case of graduates in medicine and surgery of recognised universities of not less than four years' standing.

Fees.—First examination, £5 5s.; second examination, £12 12s. The total fee payable on admission to the Fellowship is £31 10s., except for members, when the fee is £21. (The examination fees to the extent of £17 17s. count as part of the total fee.) Further information can be obtained on application to the Secretary of the Royal College of Surgeons, Lincoln's Inn Fields, London, W.C.

There are two examinations—primary and final. The primary examination is held quarterly on the first Wednesday, and on the Monday and Tuesday in the same week, in the months of January, April, July, and October. The final examination is held monthly.

Society of Apothecaries of London.

Primary Examination.—This examination consists of two parts: Part I.—Elementary Biology, Chemistry, Chemical Physics, including the Elementary Mechanics of Solids and Fluids; Heat, Light, and Electricity; Practical Chemistry, Materia Medica, and Pharmacy. A synopsis indicating the range of the subjects may be obtained on application. Part II.—Anatomy and Physiology and Histology. The examination is held in January, April, July, and October.

The final examination is held monthly, and is divided into Sections 1 and 2.

Section 1 consists of three parts.

Part I. includes: Principles and Practice of Surgery, Surgical Pathology, and Surgical Anatomy, Operative Manipulations, Instruments and Appliances.

Part II. includes: (*a*) The Principles and Practice of Medicine, including Therapeutics, Pharmacology, Pathology, and Morbid Histology. (*b*) Forensic Medicine, Hygiene, Theory and Practice of Vaccination; and Mental Diseases.

Candidates passing either (*a*) or (*b*) will not be re-examined therein.

Part III. includes: Midwifery, Gynæcology, and Diseases of New-born Children, Obstetric Instruments and Appliances. Candidates may enter for Parts I., II., and III., together or separately.

Section 1 of the Final Examination, or any part thereof, cannot be passed before the expiration of 45 months from the date of registration as a medical student.

Section 2.—This section consists of two parts.

Part I.—Clinical Surgery.

Part II.—Clinical Medicine and Medical Anatomy. Section 2 cannot be passed before the expiration of the fifth year.

Fees.—Primary examination, £10 10s.; final examination, £10 10s.; total fee, £21.

Further information, with particulars as to the course of study, and of the certificates required, can be obtained from the Secretary to the Court of Examiners, Apothecaries' Hall, E.C.

This licence is a registrable diploma in Medicine, Surgery, and Midwifery, and qualifies the holder to compete for medical appointments in the Army, Navy, and Indian Services, also for Poor-law, Civil, and Colonial appointments.

The War Office has directed a board or military commission to assemble to consider proposals for the decentralisation of Netley Hospital.

Ireland.

THE IRISH MEDICAL SYSTEM.

The system of medical teaching in Ireland differs from that in England in important particulars. In London each clinical hospital has its attached medical school, which is fully equipped, and which educates the students of that hospital and very seldom those of any other. In Dublin, on the contrary, the hospitals and schools are entirely separate (except that Sir Patrick Dun's Hospital is officially connected with Trinity College), and a student of any hospital is free to enter for the whole or any part of his course at any school or hospital he pleases. As might be expected, religion, social rank, and locality of residence have their influence in causing certain classes of students to resort to schools and hospitals suitable to their condition. But scholastic or collegiate regulations impose no restrictions as to the place of study, and as the school and hospital fees are paid in detail in Dublin, and not in a lump sum, as in London, the pupil is free to do as he pleases.

BOARD AND RESIDENCE.

There is in Dublin no organisation for domestic accommodation of medical students, save for those who are passing through Trinity College, in whose case rooms and "commons" (*i.e.*, dinner) are provided at fixed rates. Those who can afford to pay £6 6s. or £7 7s. per month for their lodging and maintenance may find accommodation in the family of some medical man who receives boarders, in which case they become members of the family for the time being. The majority of Dublin students, however, take a lodging in some economical locality, or they "chum" with some other student for the purpose. It is usual to contract with the lodging-house keeper for board or partial board, but some students cater for themselves.

COST OF MEDICAL EDUCATION IN IRELAND.

The cost of obtaining a medical qualification depends to some extent on the qualification sought. In this connection the following tables may be of use to the prospective student:—

COST OF MEDICAL EDUCATION.

School.	Cost.
School of Physic, Dub. Univ. ...	£119 14s.
Royal College of Surgeons School	£124 19s.
Catholic University School ...	£124 19s.
Queen's Colleges...	£110 (?)

COST OF DIPLOMAS OR DEGREES.

Qualifying Body.	Cost.
Dublin University	£27 (to this must be added £83 4s., the cost of obtaining an Arts degree).
Royal University	£15.
Conjoined Royal Colleges ...	£42.
Apothecaries' Hall	£22 1s.

Thus, the absolute payment will amount to somewhere between £125 and £229 18s., according as the teaching of the Queen's Colleges and the degrees of the Royal University, or the teaching and degrees of Dublin University, are taken. For the Conjoint Colleges the entire cost is £166 19s., taking the minimum mode of payment. So that, assuming that extras or voluntary costs are incurred, the total will vary, say from £170 to £200. "Grinding" usually costs £5 5s. for each of the four examinations, but if a student needs private instruction in special subjects he must pay extra for it.

This sum, or something like it, may be expended by the student or his parent in paying for lectures, &c., and examination fees as they fall due, and there is no difficulty in obtaining the needful information for his guidance if he likes to pay for his course in this fashion. If, on the other hand. he prefers to pay a large sum down, he can "apprentice" himself to a teacher who will undertake all monetary responsibility for his education, and who may be able to give him some special advantage as his own pupil at hospital. This so-called "apprenticeship," is very generally a simple contract for the payment of fees, and involves but little special teaching. All the Dublin schools require fees to be paid in advance.

DATE OF ENTRY.

The entry of names and commencement of study in Ireland is *supposed* to date from the 1st of October in each year, but the session really dates from the 1st of November, and the entry of names may be delayed by the dilatory to the 25th of the same month. It should, however, be recollected that no credit is given for studies or attendance until the entry is regularly made. The student must attend three-fourths of the lectures delivered, and if he loses a fortnight at the beginning he must make up for it afterwards by constant attendance.

The student begins work by attending a recognised medical school each morning at ten o'clock, and occupying his day, to five p.m., between lectures and dissections. His vacations are a fortnight at Christmas and a week at Easter, and he finally returns home at the end of June.

PRELIMINARY EXAMINATIONS.

The first act of the student is to pass a preliminary examination, without which he cannot get credit for any medical studies pursued. The next is to commence medical study. This he does by entering for lectures at a medical school. From the school registrar he gets a form of certificate, and his third act is to take it or send it to the Branch Medical Council, 35, Dawson Street, Dublin. He is thereupon placed upon the Register of Medical Students (without fee) and his period of study counts from that date. He must register at the earliest possible moment, or he may lose credit for his work.

The only preliminary examination held specially for medical students is that held conjointly by the Royal Colleges of Physicians and Surgeons, but other examinations, *e g.*, the public entrance at Trinity College, the matriculation of the Royal University, the Intermediate Education passes in the required subjects, and all other examinations recognised by the General Medical Council are accepted as equivalent.

The subjects of examination as prescribed by the General Medical Council are as follows:—1. English language, including a specified author, dictation, grammar, and composition; also parsing and analysis from the book specified, 2. Latin, including grammar, translation from specified authors, and translation of easy passages not taken from such authors. 3. Elements of mathematics, comprising (a) arithmetic, including vulgar and decimal fractions: (b) algebra, including simple equations; (c) geometry, Euclid, Books I., II., and III., with easy deductions. 4. One of the following optional subjects:—(a) Greek, (b) French, (c) German. The books specified are:—1. English—Shakespeare, "Merchant of Venice." 2. Latin—The first and second books of the "Æneid," or the "Jugurthine Wars," or the third book of Livy. 3. Greek—The first book of the "Iliad," or the first book of Xenophon's "Anabasis." 4. French—Fénélon's "Télémaque," Books I., II, III. 5. German—Schiller's "Wilhelm Tell."

QUALIFICATION IN IRELAND.

THE Medical Licensing Bodies of Ireland are four in number, and, as a rule, students gravitate into one or other of five classes:—*a.* Those who enter Trinity College, and take a full graduation in Arts in addition to their professional degrees. *b.* Those who take the licence of the conjoined Royal Colleges of Physicians and Surgeons. *c.* Those who take the licence of the Apothecaries' Hall. *d.* Those who take their qualifications at the Royal University of Ireland, where graduation in Arts is not necessary. *e.* Those who pursue their studies in Ireland, but who migrate to London, Edinburgh, or Glasgow for their licences. Almost all these last-named emigrants come from the Queen's Colleges, and the greater number of them from Belfast, while the Dublin students qualify, as a rule, in Dublin.

We do not attempt to give details as to the requisite courses of instruction for degrees or diplomata, as our epitome must necessarily be insufficient for the information of the student, and we can occupy our available space with information more useful to him. The official information upon which students may depend can be obtained by sending a note to the Registrars of the Licensing Bodies or Schools.

The Irish Licensing Bodies are as follows:—

THE UNIVERSITY OF DUBLIN.

THE University of Dublin grants the degrees of M.B., B.Ch., and B.A O. to students who have obtained their Arts degree, and who have been for at least five Academic years on the books of the Medical School, and the higher degrees of M.D., M.Ch., and M.A.O. to those who have held, or have been qualified to hold, for at least three years, the grade of M B. and B.Ch. It does not grant degrees to any but full graduates in Arts, consequently its degrees hold the highest rank of social and educational qualifications, and are sought for by those who look forward to occupying the best positions in the profession.

The expense of obtaining the degrees of M.B., B.Ch., and B.A.O. is approximately as follows:—Lectures, £64 11s. 6d.; Hospitals, £55 13s.; Degree Fees, £27.—Total, £147 4s. 6d.

The expense of the B.A., amounting altogether to £83 4s., should be added, making the total cost £230 8s. 6d.

In addition to its ordinary qualifications the University grants the following higher degrees:—

Doctor of Medicine.—To obtain this the candidate must have obtained the degree of M.B., or have been qualified to have obtained it for three years. He must then read a thesis before the Regius Professor of Medicine. Total fee for this degree, £13.

Master in Surgery.—The candidate must be a Bachelor in Surgery of three years' standing, and must then pass an examination in clinical surgery, operative surgery, surgical pathology, surgery, and surgical anatomy (on the dead subject). Fee for degree, £11.

Master in Obstetric Science.—The candidate must have passed the M.B. and B.Ch. examinations, and have completed, in addition to the courses for M.B., B.Ch., a course in obstetric medicine and surgery. He is then required to pass an examination in the following subjects:—Practice of midwifery, gynæcology, anatomy of female pelvis and elementary embryology, and clinical gynæcology. Fee for this degree, £5.

Diplomate in Medicine, Surgery, and Midwifery.—Candidates for the diplomas in Medicine, Surgery, or Obstetric Science must be matriculated in Medicine, and must have completed two years in Arts and five years in Medical studies. The course and examination is the same as for the degrees, except that the lectures and examinations in botany and zoology need not have been taken out or passed, and that the candidate need not have obtained an Arts degree. Fee for the diplomas in medicine, surgery, and midwifery, £21. A diplomate, on completing his course in Arts and proceeding to the degree of B.A., may become a Bachelor by attending the lectures on botany and zoology, passing the previous medical examination in those subjects, and paying the degree fees.

Qualification in State Medicine.—The candidate must be a M.D. of Dublin, Oxford, or Cambridge, must have completed, subsequent to registration, six months' practical instruction in a laboratory, and also have studied practically outdoor sanitary work for six months, under an approved Officer of Health (*v.* also page 304).

THE ROYAL UNIVERSITY OF IRELAND.

The Royal University of Ireland is purely an examining body. Its degrees are granted on one year's acts, *i.e.*, the matriculation examination of this University (none other will suffice) and a "first University examination" at the termination of the first year. The cost of the M.B. and M.Ch. of the University, with all the necessary curriculum, is about £125. Some of the Arts examinations are conducted, not only in Dublin, but at certain local centres.

The University confers the following medical degrees:—

M.B, B.Ch., B.A.O., and the higher degrees of M.D., M.Ch., and M.A.O. It also confers a diploma in sanitary science and a diploma in mental diseases.

All degrees are open to persons of either sex.

The university examinations are held in the spring, beginning about May 1st, and in the autumn, beginning about October 1st.

All candidates for any degree must pass the matriculation examination and the first university examination.

The course for the degree of M.B.. B.Ch., B.A.O., extends over five years.

Students will be admitted to the first university examination after one year from matriculation. Fee, £1.

The medical course consists of three previous examinations, one at the end of each year, and one degree examination at the end of the fifth year. Fee for each previous examination, £1; for the degree examination, £2: for the diploma, £10.

In addition the following degrees are granted:—

Diploma in Sanitary Science.—Conferred only on graduates in medicine of the university of at least twelve months' standing. Fee, £2. Subjects.—Climatology, chemistry, geology, physics, vital statistics, hygiene, sanitary law.

The M.D. Degree.—Conferred only on graduates in medicine of the university of three years' standing. They must at the same time produce a certificate of having been, for at least two academical years, engaged in hospital or private, medical, surgical, or obstetrical practice, or in the military or naval medical service. Fee, £5. The examination comprises medical diseases and the theory and practice of medicine, including pathology. Every candidate will be examined at the bedside, and required to diagnose at least three medical cases, and prescribe treatment, and to write detailed reports on at least two cases to be selected by the examiners and to discuss the questions arising therefrom.

The M.Ch. Degree.—Conferred only on graduates in medicine of the university of three years' standing, and who can produce a similar certificate of practice to that required for the M.D. degree. Fee, £5.

The examination comprises surgery, both theoretical and operative; surgical anatomy; ophthalmology and otology.

The Mastership of Obstetrics.—Conferred only on graduates in medicine of the university of three years' standing, and who can produce a similar certificate of practice to that required for the M.D. and M.Ch. degrees. Fee, £5.

The examination comprises midwifery and diseases of women and children.

Prizes, &c.—First Examination in Medicine. Two first-class exhibitions of £20 each, and two second of £10 each.

Second Examination in Medicine.—Two first-class of £25, and two second-class of £15, and the Dr. Henry Hutchinson, Stewart Medical Scholarship, value £10.

The Henry Hutchinson, Stewart Medical Scholarships, in psychological medicine, diseases of the nervous system, and anatomy physiology and pathology of brain, cord, and nerves. Competition among medical graduates of not more than two years' standing. Fee £2.

Third Examination in Medicine.—Two first-class exhibitions of £30 each, and two second of £20 each.

Medical Degrees Examination.—Two first-class exhibitions of £40 each, and two seconds of £25 each. One travelling medical scholarship of £100. One medical studentship of £200 per annum, tenable for two years.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

The examinations held conjointly by the two Colleges are the inlet of most Irish students to the profession, especially of those educated in Dublin. The course, as in other bodies, extends over five years, with examinations at the end of the first, second, third, and final years. These examinations are conducted by examiners chosen by each of the Colleges for the subjects appropriate to them. The curriculum has recently been revised, and made of a more practical nature. In common with the English Colleges, the subjects of the First Professional Examination may be studied either at a medical school, or at an institution other than a medical school recognised by the Colleges, after due inspection, for instruction in these subjects. We recommend students to apply for the official programme to the Secretary of the Committee of Management, Royal College of Physicians, or to the Registrar of either College. In the case of the Preliminary Examination seven clear days' notice must be given to the Secretary.

The total of the examination fees, spread over the four examinations, is £42, while the school and hospital fees, if taken in Dublin, amount to £124 19s., making altogether £166 19s., exclusive of re-examination fees, which have to be paid in case the candidate fails to pass his examination at the first attempt.

The conjoined Colleges also confer a diploma in Public Health, of which information will be found on page 304.

ROYAL COLLEGE OF PHYSICIANS IN IRELAND.

This College issues a licence in Medicine and a licence in Midwifery to registered medical practitioners.

The subjects of examination for the former qualification are:—Practice of medicine, clinical medicine, pathology, medical jurisprudence, midwifery, hygiene and therapeutics.

The candidate for the licence in Midwifery must produce certificates of having attended a course of lectures on midwifery, and of having attended practical midwifery and diseases of women for six months, at a lying-in hospital or maternity recognised by the College; or, where such hospital attendance cannot have been obtained during any period of the candidate's course of study, of having been engaged in practical midwifery under the supervision of a registered practitioner holding a public medical appointment, the certificate in either case to state that at least twenty labour cases have been actually attended. A registered medical practitioner of five years' standing is exempted from the examination by printed questions.

Fees.—Fee for the licence to practise medicine, £15 15s. Fee for examination for the licence to practise midwifery, £3 3s.

Membership.—A candidate for the membership of the College must be twenty-five years of age and a licentiate of the College of three years' standing; or, if a graduate of Arts of a university in the United Kingdom, or a practitioner of seven years' standing, a Licentiate of one year's standing. He must not be engaged in trade, dispense medicine, or practise in partnership. He must also have held during at least six months the office of resident physician or resident medical pupil, or have acted during the same period as medical clinical clerk in a recognised hospital, or have been in medical charge for at least twelve months of a public institution for the treatment of the sick. Every candidate must pass an examination in principles of medicine, practice of medicine, and clinical medicine. The fee for the examination is £21.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

This College grants a license in Medicine to registered medical practitioners. Candidates who hold registrable surgical diplomas, including the licence of the Apothecaries' Society of London, granted since October, 1886 are admitted to examination without further evidence of study, but candidates who hold medical qualifications only, including the L.S.A. granted before October, 1886, will be required to produce certificates of two courses of lectures in anatomy and dissections, one course of practical histology, one course of lectures in surgery, and one course of operative surgery.

Candidates are examined in surgery, clinical and operative; surgical appliances; and ophthalmic surgery. The fee is £26 5s. The fee for a special examination is £31 10s.

A diploma in midwifery is also granted after examination to registered medical practitioners. Candidates must produce evidence of (*a*) attendance on a course of lectures on midwifery and diseases of women and children in a recognised school; (*b*) attendance on six months' practice at a recognised lying-in hospital or recognised dispensary for lying-in women and children; and (*c*) of having conducted at least thirty labour cases. The fee for the examination is £15 15s.

Fellowship.—Candidates for the Fellowship of the College must enter their names with the Registrar at least a month before the date of examination, in order that the Council may decide whether to approve of the application. If the application is approved, the candidate will be admitted to the next sessional examination or to a special examination if granted by the Council. Candidates are divided into two grades:—

Grade 1.—Licentiates or graduates in surgery of less than ten years' standing.

Grade 2.—Licentiates or graduates in surgery of more than ten years' standing.

Candidates in Grade 1 must pass two examinations—Primary (in anatomy and physiology) and Final (in surgery). Candidates in Grade 2 need pass but one examination in surgery.

Fees.—Grade 1.—For Licentiates of College: Primary examination, £15 15s.; Final examination, £10 10s. Licentiates in Surgery of other licensing bodies: Primary examination, £26 5s.; Final examination, £15 15. Students of the College: Primary examination, £5 5s.; Final examination, £21. Students of other licensing bodies: Primary examination, £10 10s.; Final examination, £31 10s.

Grade 2.—Licentiates of the College, £26 5s.; Licentiates in Surgery of other licensing bodies, £42.

APOTHECARIES' HALL OF IRELAND (L.A.H.).

This body is authorised to grant a complete qualification in medicine, surgery, and midwifery, recognised and registrable under the Medical Act of 1886, and entitling the holder to occupy medical appointments in all the public services. It also confers the legal right to dispense medicines in Ireland. The examinations are held on the third Monday in January, April, July, and October, and the requirements in respect of studies are approximately the same as those of the Conjoint Examinations of the Royal Colleges of Physicians and Surgeons in Ireland. The examination fees payable for the qualification of L.A.H. are as follows:—First professional, £5 5s.; second, £5 5s.; third, £5 5s.; final examination, £6 6s.

The fees for re-examination are £1 1s. for each subject, excepting in the subjects of chemistry, pharmacy, surgery, medicine, second anatomy, and ophthalmology, the fees for which are £2 2s.

The fee for final alone is £15 15s., when the other examinations have been taken elsewhere. Candidates may be admitted to a special examination under special circumstances, at an extra fee of ten guineas.

Each candidate must produce evidence of having before entering on medical studies passed a preliminary examination in general education recognised by the General Medical Council, and of having been registered by that Council as a student in medicine. Certificates of medical study will not be recognised if the commencement of the course to which the certificate refers dates more than fifteen days prior to such registration, except in the subjects of physics or biology. This registration is not undertaken by the Hall, but the student must apply to the Registrar of the General Medical Council that he may be so entered. The details of the course of education required and syllabus of the examinations will be supplied on application to the Registrar at 40, Mary Street, Dublin.

Candidates already on the *Register* will receive the diploma of the Hall on passing an examination in medicine, surgery, midwifery, and pharmacy, and paying a fee of ten guineas. If medicine or surgery are required two guineas extra will be charged. The candidate will be exempt from each of the above subjects, which are covered by his previous qualification or qualifications.

In addition to the qualifying diplomas awarded by the above bodies there are diplomas in special subjects awarded as well. These are the licence in Dentistry and the diploma in Public Health.

THE LICENCE IN DENTISTRY.

There is probably no specialty in surgery which gives as great a number of its practitioners a living and the prospect of an income as dentistry. A young man who has got his diploma and knows something of his business and is willing to attend to it, seldom fails to get a substantial foothold in Ireland in a few years. The Irish diploma in Dentistry is granted by the Royal College of Surgeons.

Course of Study for the Licence in Dentistry.—Candidates are required to pass three examinations, viz.:—Preliminary (in General Education), Primary Dental, and Final Dental.

The Primary Dental examination is in (1) Physics, (2) Chemistry, including Metallurgy, (3) Anatomy, (4) Physiology and Histology, (5) Surgery—all these subjects with special reference to dentistry. The examination fee is £10 10s. The Final examination is in (1) Dental Surgery—theoretical, clinical, and operative; (2) Dental Mechanics—theoretical, clinical, and practical, including metallurgy. The fee for this examination is, for a Licentiate of the College, £10 10s.; for any other candidate, £26 5s. Each of these examinations must be preceded by complete courses of study in these subjects.

Exemptions.—Candidates educated in England or Scotland are admitted to the examination on the production of the certificates that would be necessary for both Primary and Final examinations in their own countries. Furthermore, the College may admit to examination, *sine curriculo*, candidates whose names are on the *Dental Register*, and who are unable to furnish the certificates required by the foregoing regulations, on presentation of a special schedule of application, accompanied by such certificates they may have of general or professional education, and by the required fee.

THE DIPLOMA IN PUBLIC HEALTH.

This diploma is granted by Dublin University, the Royal University, and the conjoined Royal Colleges. Every candidate must be a registered medical practitioner. The examination is in:—(1) Chemistry (including chemical physics). (2) Engineering and Architecture. (3) Sanitary Law and Vital Statistics. (4) Hygiene. (5) Bacteriology. (6) Meteorology. The General Medical Council recommend that all candidates shall have studied in a special bacteriological laboratory, also for six months as pupil of a working medical officer of health, described, for Ireland, as "the medical officer of health of a county or of one or more sanitary districts having a population of not less than 30,000; or a medical officer of health who is a teacher in Public Health of a recognised medical school."

In addition to taking the prescribed course a candidate for the D.P.H. of the University of Dublin must be a Doctor in Medicine or a graduate in Medicine, Surgery, and Midwifery of Dublin, Oxford, or Cambridge, and his name must have been on the *Medical Register* for at least twelve months before the examination. The Royal University only confers its diploma on its own graduates.

THE IRISH MEDICAL SCHOOLS.

The Irish Medical Schools are as follows:—

The School of Physic of Dublin University.—This school is formed by an amalgamation of the School of Trinity College and of the College of Physicians.

Some of the professors in the schools are *ex officio* medical officers of Sir Patrick Dun's Hospital. The school is open to all students, and the instruction provided is of a high quality.

Every student of the school must be matriculated by the senior lecturer, for which a fee of 5s. is payable, but he need not attend any of the Arts course unless he desires to obtain a university licence or degree, in medicine, surgery, and midwifery. No student is permitted to matriculate unless he has passed the entrance examinations of the University, of the Royal University, of the College of Surgeons, or some other examination recognised by the General Medical Council.

Two medical scholarships are given annually at the School of Physic, value £20 per annum, tenable for two years, the examinations for which are held each year in June; one scholarship is given in anatomy and institutes of medicine; the other in zoology, chemistry, botany, and experimental physics.

A prize of £100 is awarded by the Board to the successful candidate at a special examination in alternate years in medicine or in surgery, provided that the merit be deemed sufficient. The successful candidate is required to spend three months in the study of medicine or surgery as the case may be, in Berlin, Paris, or Vienna. Before he can obtain the first instalment of £50 he must satisfy the Senior Lecturer that he possesses sufficient knowledge of a Continental language to derive full benefit from the prize. The examination is held in June, and is open to students who have passed the Degree Examination in Medicine or in Surgery, as the case may be, within two years of the examination.

In order to obtain the second sum of £50 the prizeman must have furnished to the Regius Professor his formal report on the hospitals attended by him, within two years from the time of obtaining the prize.

Class prizes are given at the end of the session of between £5 and £10 in value.

The John Mallet Purser Medal, founded by Prof. Purser's past pupils, is awarded annually to the student who, at the ordinary June "half M.B." Examination, shall obtain highest marks in Physiology and Histology, provided that he passes the examination in full.

The Royal College of Surgeons in Ireland. Schools of Surgery.—By the amalgamation of the Carmichael College and the Ledwich School with the School of the Royal College of Surgeons the combined schools form one of the largest medical teaching bodies in Ireland. These schools are attached by Charter to the Royal College of Surgeons. They are carried on within the College building, and are specially subject to the supervision and control of the Council, who are empowered to appoint and remove the Professors, and to regulate the methods of teaching pursued. The buildings have been reconstructed, the capacity of the dissecting room nearly trebled, and special histological, pathological, bacteriological, public health, and pharmaceutical laboratories fitted with the most approved appliances in order that students may have the advantage of the most modern methods of instruction.

The diplomas of the College are open to students of either sex. Separate rooms have been provided, and careful provision made for the instruction and comfort of women students.

Prizes.—The Barker Prize, £21; the Carmichael Scholarship, £15; the Mayne Scholarship, £15. The Gold and Silver Medals in Surgery, and the Stoney Memorial Gold Medal in Anatomy.

Class Prizes of £2 and £1, accompanied by medals if sufficient merit is shown, will also be given in each subject. Prospectus and student's guide can be obtained on written application to the Registrar, Royal College of Surgeons, Dublin.

The Catholic University School is situated in Cecilia Street, Dame Street. It prepares students for all medical examinations, particularly those of the Irish Colleges of Physicians and Surgeons, and the Royal University of Ireland. The school has recently been rebuilt and refitted, its working space having thereby been nearly doubled, and several new laboratories, including those for the study of bacteriology and public health, have been added. The institution has also been recently chartered, under the Educational Endowment (Ireland) Act, and it is now controlled by a Board of Governors. The total fees for school and hospital courses is £160, payable as the courses are taken out.

The following Exhibitions are awarded annually:—Two first year's, value £12 10s. each; two second year's, value £10 each; one third year's Royal Exhibition of £12 10s.; one final Conjoint Colleges' Exhibition of £12 10s.; two large gold medals, besides several other class medals.

A Guide for Medical Students, which gives all the information required by parents, and by students who desire to join the medical profession, may be obtained free on application to the Registrar.

THE QUEEN'S COLLEGES—BELFAST, CORK, AND GALWAY.

These three important academic institutions were the special schools of the Queen's University. They have ceased to have any direct relation to a central examining body, but educate students for all colleges and degrees, and are maintained, as hitherto, by a handsome Government grant. The same curriculum as that formerly adopted is continued, and the various exhibitions and scholarships are still available. Each college has the disposal of about £1,500 per annum in scholarships and prizes. The curriculum is generally well adapted for preparation for the Royal University examination. The colleges are well adapted for high-class technical education, having lecture rooms provided with every appliance necessary in the modern training of a medical student. The colleges are completely equipped with students' reading rooms and lending libraries and refreshment rooms, and with all adjuncts to collegiate life, such as literary societies and athletic organisations. The expense of living in the collegiate towns is quite moderate. The course of lectures in the winter session must be diligently attended, no student obtaining a certificate who has not put in three-fourths of a course. The scholarship examinations are held in October.

QUEEN'S COLLEGE, BELFAST.

The total cost of the medical curriculum of the Royal University of Ireland, including examination fees and perpetual fee for the Royal Hospital, but not including fees for the special hospitals, is about £95. If the Conjoint Examination of the Royal Colleges is taken the expense is almost the same.

Clinical instruction is given at the Royal Victoria Hospital. The Maternity Hospital, the Ulster Hospital for Women and Children, the Hospital for Sick Children, the Ophthalmic Hospital, the Ulster Eye, Ear, and Throat Hospital, and the District Lunatic Asylum are also open to students.

Prizes.—(1) Ten medical scholarships each year, value £20 each; (2) two Dunville studentships (one each alternate year), value £145 each; (3) one Andrews studentship each alternate year, value £145; (4) numerous sessional prizes.

During the summer session special classes are formed in bacteriology and clinical pathology, and during the winter facilities are afforded to medical men to work at these subjects in the pathological laboratories. Last summer a course of lectures and demonstrations was given in the anatomical department on the Advanced Anatomy of the Nervous System, and next summer it is expected that a similar course on some department of applied anatomy will be arranged.

A pamphlet containing full information can be had on application to the Registrar, Queen's College, Belfast.

QUEEN'S COLLEGE, CORK.

The arrangements in the Faculty of Medicine are made chiefly with reference to the requirements of the Royal University of Ireland, but students proceeding for the examinations of the Conjoint Boards of England, Scotland, or Ireland, the Society of Apothecaries of London, or the Apothecaries Hall of Ireland can arrange the courses of lectures which they attend, and the order in which they attend them, to meet the requirements of those bodies. Certificates of attendance in the College are also accepted by the University of Cambridge. The total fees for the College lectures and Hospital attendances required by the Royal University of Ireland is about £85.

Clinical instruction is given at the North and South Infirmaries. Students can also attend the Mercy Hospital, the Cork Union Hospital, the County and City of Cork Lying-in Hospital, the Maternity, the Hospital for Diseases of Women and Children, the Fever Hospital, the Ophthalmic and Aural Hospital, and the Eglinton Lunatic Asylum. The winter session commences on October 27th, and ends at the end of April. The courses of the summer session are delivered in the months of April, May, and June.

Scholarships and Prizes.—Eight medical scholarships, two in each of the first four years, of the value of £25 each, and in the fifth year the Blaney Scholarship of the value of £35, and a Senior Exhibition, value £30. Three Exhibitions, one in practical medicine, one in practical surgery, and one in practical midwifery, each of the value of £15. Book prizes at the sessional examinations.

Further information can be obtained in the College Regulations, or on application to the Registrar, Queen's College, Cork.

QUEEN'S COLLEGE, GALWAY.

Clinical teaching is carried on in the Galway Hospital, established as a Public General Hospital (in the place of the County Galway Infirmary) by Act of Parliament (1892). The Galway Fever Hospital is also open to students. The Medical lectures are recognised by the Royal University of Ireland and the various Licensing Bodies in the United Kingdom.

PRIZES.—There are eight Junior Scholarships in Medicine of the annual value of £25 each. Two are tenable by matriculated students of the first, second, third, and fourth years. The Council has power to award exhibitions for distinguished answering. Sessional prizes are offered in each subject. A Senior Scholarship in Anatomy, value £40, the holder of which is usually appointed Demonstrator, is offered annually for competition, tenable for one year by a student who shall have attended the Medical School of the College for at least two sessions, and shall have obtained a Degree in Arts or Medicine, or a Diploma in Medicine from a Licensing Body. Scholarship examinations are held at the commencement, and those for Sessional Prizes at the close, of each session.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

ROYAL COLLEGE OF SCIENCE FOR IRELAND.

SESSION 1902-1903.

This College, situate in St. Stephen's Green, Dublin, supplies a complete course of instruction in science applicable to the industrial arts, especially those which may be cast broadly under the heads of chemical manufactures, engineering, physics and natural science. A diploma of Associate of the College is granted at the end of the three years' course. Non-Associate students may join for any course required. There are four Royal scholarships of the value of £50 each yearly, with free education, tenable for two years. Two are competed for by the associate students at the end of each session. The chemical, physical, zoological and botanical, geological and mineralogical laboratories and drawing schools are open daily for practical instruction. The Session commences on Wednesday, October 1st.

The courses of chemistry, physics, botany, geology and mineralogy, and zoology are recognised by the Royal University of Ireland, and certificates of attendance are granted to medical and other students attending these courses, as also the courses of the chemical, physical, zoological, botanical, and geological laboratories.

THE DUBLIN HOSPITALS.

The clinical hospitals in Dublin are ten in number, exclusive of three lying-in hospitals. There are also two children's hospitals, an orthopædic hospital, a fever hospital, an ophthalmic hospital with two centres, a dental hospital, and other special institutions. Some of the clinical hospitals, though they have no actual or official connection with any school, are in close affinity with certain teaching bodies; while others, again, are without any special connection with any school. While, however, such affiliation of a school or hospital may exist, it should be remembered that the Dublin schools and hospitals are open to all comers, and the student is competent to attend any hospital or any school he wishes, and to change his place of instruction from year to year as he may see fit.

The Irish Licensing Bodies require attendance on hospitals for twenty-seven months, *i.e.*, three winter sessions of six months and three summers of three months, within the five years of study. The fee at all general hospitals is £8 8s. in winter, and for the summer £6 6s., or £12 12s. for the entire session of nine months if taken together.

GENERAL HOSPITALS.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS.—The accommodation at these hospitals is as follows:—Hardwicke Hospital, 120 beds; Whitworth Hospital, 82 beds; Richmond Hospital, 110 beds—total, 312 beds. These hospitals are visited each morning at nine o'clock by the Physicians and Surgeons, and, in addition to the usual bedside instruction, clinical lectures are delivered on the most important cases. Special instruction is also given on various branches of medicine and surgery. The Truss Establishment, for the distribution of trusses to the ruptured poor of Ireland, is connected with these hospitals. There are very large ophthalmic, aural, throat, and gynæcological dispensaries, and instruction in these important subjects is given. Eight resident clinical clerks are appointed each half-year, and provided with furnished apartments, fuel, &c. The appointments are open not only to advanced students, as formerly, but also to those who are qualified in medicine or surgery. A house surgeon for the Richmond Hospital and a house physician for the Whitworth and Hardwicke Hospitals are elected annually, and receive a salary. The Richmond Lunatic Asylum, containing 1,600 beds, adjoin these hospitals.

MEATH HOSPITAL AND CO. DUBLIN INFIRMARY.—This hospital was founded in 1753, and now contains 160 beds available for clinical teaching. A new building for the isolated treatment of fevers, containing 40 beds, has recently been added. The certificates of this hospital are recognised by all the universities and licensing bodies of the United Kingdom. Medical and surgical resident pupils and clinical clerks and dressers are appointed every six months, and a house surgeon is elected annually. A prospectus giving the complete arrangements for medical and surgical classes for the coming session may be obtained from the secretary of the Medical Board, Mr. Lane Joynt, F.R.C.S.I., 84, Harcourt Street, Dublin.

* THE ADELAIDE MEDICAL AND SURGICAL HOSPITALS are in Peter Street, and occupy a central position within a few minutes' walk of the College of Surgeons and Trinity College. From October 1st, the physicians and surgeons visit the wards and give instruction at the bedside at the advertised hours. There is a large detached fever hospital, and also wards for infants and children. Operations are performed, except in cases of urgency, at 10 a.m. on Tuesday, Thursday, and Saturday. Special hours are devoted to clinical instruction in the diseases peculiar to women, and students are individually instructed in the use of the stethoscope, ophthalmoscope, laryngoscope and microscope; also special instruction is given on practical pathology and X-ray photography. Three resident pupils are selected half-yearly and a house surgeon annually. Prize examinations, including examinations for the Hudson Scholarship, £30 and a gold medal, and a senior prize of £10 and a silver medal, in addition to surgical and medical prizes, are held at the termination of the session. The

large dispensaries afford facilities for the study of eye, ear, throat and cutaneous diseases, as well as of minor surgery and dentistry. Further particulars from Mr. Heuston, F.R.C.S.I., 15, Stephen's Green North.

Sir Patrick Dun's Hospital is situated on the south-eastern side of the city, and about half a mile from the University School of Physic. It is officered exclusively by the professors and examiners in that school. Formerly all University students were compelled to attend this hospital, which was purely a medical institution, but some years ago the obligation was removed, and the hospital was opened for surgical cases. It is now free to all students. There is a special wing devoted to fever cases, and regular clinical instruction is given by the members of the medical staff throughout the winter and summer sessions. Special classes for students commencing their hospital studies will be held in these departments during the months of October, November, and December. They will embrace the elements of medicine and surgery, including note-taking. Opportunities are also afforded to students for examining cases of throat, ear, and eye diseases, as well as for performing minor surgical operations and bandaging. In the X-ray Department opportunities are given the members of the hospital class of seeing the various applications of the X-rays to the diagnosis and treatment of injury and disease.

* **The Royal City of Dublin Hospital.**—This hospital is situated in Upper Baggot Street, about ten minutes' walk from the Royal College of Surgeons and Trinity College. It has just been enlarged and improved to a very considerable extent. A special course of instruction is given on ophthalmic and aural disease. There are special wards for the treatment of diseases of the eye, of children, and of women, and practical instruction is given on diseases peculiar to women; there is also a separate building for infectious diseases. Clinical clerks to the physicians and dressers to the surgeons are appointed from the most deserving of the class. A new operation theatre, sterilising room, and anæsthetic room have been constructed in accordance with the most modern surgical requirements. A resident medical officer is elected annually, and resident medical and surgical pupils are appointed from among the past and present students of the hospital. Operations are performed on Tuesdays, Thursdays, and Saturdays, at 10 a.m. Full particulars can be had on application to Mr. G. Jameson Johnston, M.B., F.R.C.S.I., Hon. Sec. Med. Board.

* **Mater Misericordiæ Hospital.**—This hospital, containing 335 beds, is open at all hours for the reception of accidents and urgent cases. Fifty beds are specially reserved for the reception of patients suffering from fever and other contagious diseases. A course of lectures and instruction on fever will be given during the winter and summer sessions. A certificate of attendance upon this course to meet the requirements of the various licensing bodies may be obtained. Opportunities are afforded for the study of the diseases of women in the wards under the care of the obstetric physician, and at the dispensary, held on Tuesdays and Saturdays. Lectures on clinical gynæcology will be delivered on Saturdays at 11 a.m. Ophthalmic surgery will be taught in the special wards and dispensary. A special course of instruction in pathology and bacteriology, as applied to medicine, will be given. Connected with the hospital are extensive dispensaries, which afford valuable opportunities for the study of general, medical and surgical diseases, accidents, &c. Leonard Prizes: One gold and one silver medal will be offered for competition annually in the subject of medicine, and one gold and one silver medal in the subject of surgery. Junior Leonard Prizes: Two prizes of the value of £3 and two prizes of the value of £2 will be offered for competition in medicine and surgery respectively.

* **Mercer's Hospital.**—This hospital, founded in 1707, is situated in the centre of Dublin, in the immediate vicinity of the Schools of Surgery of the Royal College of Surgeons, the Catholic University School of Medicine, and within fifteen minutes' walk of Trinity College. It contains 120 beds for medical and surgical cases, and arrangements have been made with the medical officers of Cork Street Fever Hospital, whereby all students of this hospital are entitled to attend the clinical instruction of that institution and become eligible for the posts of resident pupil, &c. There is a large out-patient department, and a special department for diseases peculiar to women. There are also special wards for the treatment and study of children's diseases. During the past few years the hospital has undergone extensive alterations in order to bring it up to modern requirements. A house-surgeon is appointed annually. Five resident pupils are appointed, each for six months, and clinical clerks and dressers are appointed monthly from among the most deserving members of the class. The certificates of this hospital are recognised by all the licensing bodies. For further particulars apply to Mr. R. Charles B. Maunsell, M.B., F.R.C.S., 32, Lower Baggot Street, Dublin.

* **St. Vincent's Hospital**, Stephen's Green, Dublin, was established in 1834. The hospital has 160 beds, and in connection with it there is a largely-attended dispensary, a convalescent home, and a nurse's institute. In addition to the ordinary clinical instruction, systematic courses of lectures are given in each department of medicine and surgery, and are illustrated by cases in the hospitals. The resident officers consist of a house surgeon, a house physician, and four resident pupils. Three clinical lectures are delivered daily in the wards, illustrated by selected cases, and beginning at 9 a.m. Two gold medals and other valuable prizes and certificates of merit are awarded at the end of each session. A prospectus can be had from Dr. Tobin, St. Stephen's Green.

* **Dr. Steevens' Hospital**, situated at Kingsbridge, is one of the oldest and largest of the clinical hospitals in Dublin, and contains over 200 beds. Recently, a very fine Nurses' Home has been added to the institution, with accommodation for over seventy nurses. And a new and thoroughly equipped dispensary and out-patient department has been completed, and opened to patients. Licensing bodies recognise six months' residence as equivalent to a year's ordinary attendance at hospital. The manufactories and railway works in the neighbourhood supply this hospital with large numbers of accidents and other cases, while the special ward for venereal diseases affords exceptional opportunities for the study of this important subject.

* **Jervis Street Hospital, Dublin.**—Jervis Street Hospital is the oldest established in Dublin. The new hospital was completed in 1896, since which time it has been opened for the reception of patients. In addition to large medical and surgical dispensaries, the out-patient department includes special departments for the treatment of diseases of the skin, eye, ear, and throat, and diseases peculiar to women. Two resident surgeons are appointed annually. Clinical clerks and surgeons' dressers are selected from among the most attentive of the advanced students without the payment of any additional fee. Twelve interns are appointed annually, and are provided with apartments, &c., free of expense. Special certificates are given to resident pupils and dressers who have performed their respective duties to the satisfaction of the physicians and surgeons. Gold and silver medals are given after examinations held at the close of the summer session.

SPECIAL HOSPITALS.

The special hospitals of Dublin are the Rotunda, the Coombe, and the National Lying-in Hospitals, Cork Street Fever Hospital, the Royal Victoria Eye and Ear Hospital (amalgamation of St. Mark's Ophthalmic Hospital, and the National Eye and Ear Hospital), the Dental Hospital, the Throat Hospital, the Orthopædic Hospital, and the Children's Hospitals in Harcourt Street and in Temple Street.

The Rotunda Hospital.—This, the largest and best-known lying-in hospital of the United Kingdom, is every year becoming more appreciated as a school of midwifery, and as affording peculiar advantages both to the student and the practitioner for acquiring a thorough knowledge of gynæcology. It contains two distinct departments—viz., the lying-in hospital, into which about 1,800 cases of labour are admitted annually, and the hospital for the treatment of diseases peculiar to women, into which some 500 patients are now admitted during the course of the year. The present master, Dr. Purefoy, was previously well known as Gynæcologist to the Adelaide Hospital. There is a large extern maternity in connection with the hospital, more than 2,000 women being attended during the past year at their own homes, and also a large daily dispensary for the treatment of the diseases peculiar to women. Every facility is afforded for the study of the special departments of medicine to which the hospital is devoted, and both students and midwives are granted a diploma on passing an examination. Two clinical clerks, at a salary of £50 per annum each, are appointed every six months from among the students who have attended the full course of instruction in the hospital. A considerable number of female pupils are also yearly trained as nurse tenders and midwives.

Coombe Lying-in Hospital.—This hospital, which was rebuilt and considerably enlarged, and contains 65 beds, was founded in 1826 by Mrs. Boyle, and was incorporated by Royal Charter in 1867. This hospital is situated in the centre of a district densely populated by the lower orders, and thus affords the amplest opportunities for practice. It receives about 800 labour cases within its walls, while those attended as extern amount to more than 2,000 in number. Moreover, the chronic hospital for the reception of cases of the diseases of females gives admission to about 200 to 300 patients annually. The fee for attendance is £8 8s. for six months as extern, and £18 18s. as intern pupil. During that period, the pupil attends on given days and nights in each week, and takes charge in his turn of any case that may be admitted to the labour wards, or may call for his assistance outside. Two resident pupil midwifery assistantships and a clinical clerkship are obtainable half-yearly by all pupils who have obtained their midwifery diploma from the hospital, and special certificates are given. Lectures are delivered in the hospital, and clinical instruction is given daily at the bedside. Nurses who take out the usual hospital course of six months receive special instruction in midwifery, and can obtain their diplomas on the termination of the course.

* National Maternity Hospital.—This institution, under the mastership of Dr. Barry and Dr. A. Horne, is situated in Holles Street.

Sir Patrick Dun's Maternity.—This is a branch of Sir P. Dun's Hospital, and is under the management of the King's Professor of Midwifery in Dublin University. Students desirous of entering for twelve months' instruction in practical midwifery are required to pay a maternity fee of £3 3s. each to the Registrar of the hospital, and to send in their names to the Board of Governors before January 1st in each year. Students of Trinity College are not liable to any other payment for instruction in practical midwifery. Other students are required to pay £3 3s. each to the King's Professor, for twelve months' practical instruction, in addition to the hospital maternity fee. The certificates of Sir Patrick Dun's Hospital are recognised by the Royal University and the Conjoint Royal Colleges of England, Ireland, and Scotland.

Cork Street Fever Hospital is the only special fever hospital in Dublin. It is supported mainly by an annual government grant, and capitation grants for patients. Regular clinical instruction is given during the winter and summer session to those who desire a special course in fevers. All particulars may be obtained on application to the Registrar and Resident Medical Officer.

* The National Children's Hospital for the treatment of all non-infectious diseases peculiar to children, with which the Pitt Street Children's Hospital, founded in 1821, was amalgamated, is capable of containing 50 beds for the reception of cases of deformity and all other forms of surgical disease. There is a large general dispensary for extern patients held daily from 10 to 11. Operations are performed on Saturday at 12 o'clock. Practitioners and students can attend on application to Mr. Ormsby, F.R.C.S.I.

* Dublin Orthopædic Hospital, Great Brunswick Street, containing 40 beds for the treatment of every class of deformities and for the practice of orthopædic surgery. This institution is under the management of Mr. Swan, F.R.C.S.I.

The Royal Victoria Eye and Ear Hospital consists—until the new combined hospital is erected—of the two institutions which have, heretofore, given special instruction in ophthalmology, separately. They are:—(1) St. Mark's Ophthalmic Hospital and Dispensary in Lincoln Place.—This hospital was founded by the late Sir William Wilde, and contains 50 beds. Clinical lectures are delivered each morning, and operations are performed daily as occasion requires. Instruction in aural surgery is also given. (2) National Eye and Ear Infirmary, Molesworth Street.—This hospital contains 30 beds. Clinical instruction in diseases of the eye, including the use of the ophthalmoscope, is given daily. Operations at 12 o'clock. Instruction in aural surgery is also given. Afternoon classes for practical instruction in the use of the ophthalmoscope, &c., and for the demonstration of cases, are formed from time to time by the assistant surgeons.

* The Incorporated Dental Hospital, Lincoln Place.—This handsome hospital, recently erected, is the only special Dental Hospital in Dublin. It is officered by a very strong staff of the leading dental surgeons of Dublin, and has a large *clientèle* and extensive practice among the Dublin poor. The fees are £15 15s. for first year's study, and £12 12s. for second, and proportionately smaller fees for shorter periods.

The City Hospital for Diseases of the Skin.—Senior students are admitted free to the practice of this hospital, which has a large out-patient attendance (nearly 7,000 for year ending August, 1902). Classes of instruction in the use of the Finsen light and X-ray treatment as applied to dermatology, with demonstrations on cases already undergoing the treatment will be held at regular intervals during the winter and summer sessions.

* No returns have been received from these institutions, and consequently we cannot guarantee the accuracy of our information.

BELFAST HOSPITALS.

Hospital for Sick Children, Queen Street.—This institution, erected by voluntary donations, and supported by voluntary contributions, was opened for the reception of patients on April 24th, 1879. The hospital consists of a medical ward with twenty-eight beds, and one of a similar size for surgical cases. It is strictly non-sectarian in its principles, and is open to all denominations. Children from birth to the age of 12 years, and not suffering from contagious disease, are admissible as in-patients. A very large extern is conducted in the out-patient department between the hours of 9 and 10 a.m. where children from birth to 14 years are attended to The convalescent home, which is situated at Newtownbreda, contains thirteen cots, and its situation and equipment render it an admirable adjunct to the after-treatment of the cases admitted to the hospital. During the winter session systematic courses of lectures and demonstrations in the medical and surgical diseases of infancy and childhood are delivered in the wards on Wednesday and Friday of each week at 9 a.m.

* Mater Infirmorum Hospital.—Established 1883. 160 beds.

* Maternity Hospital.—Established 1794. 16 beds.

* Ophthalmic Institution, Eye and Ear Hospital, Gt. Victoria Street.—Established 1844; new hospital erected 1867. 30 beds.

* Royal Victoria Hospital.—Established 1814; incorporated by Royal Charter, 1875 and 1898. 209 beds; Convalescent Hospital, 30 beds; Children's Hospital, 40 beds; Consumptive Department, 10 beds.

* Ulster Eye, Ear, and Throat Hospital—Established 1871. New Hospital opened 1874. 30 beds.

Ulster Hospital for Children and Women, Mountpottinger, Belfast, is the only hospital in the large part of the city situated on the County Down side of the river. It is placed in a working-class district, and has a great field for its charitable operations. There are in the hospital about twenty-two beds for children and eight for women. There is an extern department for children open every week day, except Saturday, from 9 till 10, and for women at 11.30, and a special department for diseases of the eye, ear, and throat on Tuesdays and Fridays from 9 till 10. During the summer and winter sessions, clinical instruction is given to students daily, operations being chiefly performed on Wednesday and Friday. There is a resident midwife for extern work, and every facility is afforded students for attending their cases in the district.

CORK HOSPITALS.

*County and City of Cork Hospital for Women and Children.—Established 1874. 90 beds.

*County and City of Cork Lying-in Hospital.—Established 1798. 17 beds.

*Eye, Ear, and Throat Hospital, Western Road.—Incorporated 1898. 35 beds.

*Fever Hospital and House of Recovery.—Established 1801. 110 beds.

*Maternity.—Established 1872.

*Mercy Hospital.—Established 1857. 80 beds.

*North Charitable Infirmary.—Established 1774. 110 beds.

*South Charitable Infirmary and County Hospital.—Established 1773. 104 beds.

GALWAY HOSPITALS.

*County Hospital.—Established 1786. 60 beds.

*No answer to our request for information received from these hospitals.

IRISH PUBLIC SERVICES.

The Poor-law Medical Service.

Since the early part of 1899, a vital change has taken place in the Irish Poor-law Medical Service - the service which has, heretofore, absorbed most of the Irish rising medical generation. By the Irish Local Government Act the administration of the system, the appointment and payment and allocation of duties of medical officers, was transferred from the old Boards of Guardians, composed in due proportion of members elected by the local voters and members who acted *ex-officio* in virtue of property qualifications, to new boards composed wholly of the elected representatives. This change has had the most disastrous effect upon the service. The *ex-officio* guardians, *i.e.*, the local gentry, were, thereby, eliminated, and the sole control of the service has been transferred to the elected Guardians, who have, we regret to say, sought to place considerations of economy before everything—before the welfare of the poor, and before the just rights of the medical officer. Questions of religion and politics are so rampant on Irish elected Boards that the medical officer who is at variance on these matters with the majority of the Board, who governs him, has not a pleasant life. The Irish Medical Association, whose work it is to safeguard the interests and improve the condition of the Poor-law medical officer, considers it an imperative duty to point out to young practitioners the following facts:—(1) That the Poor-law Medical Service is one in which there is no promotion. (2) That it is a service where few facilities exist for original research, and still less for further medical culture, especially in the rural districts. (3) That, while medical education has become wider in its requirements, and more costly and difficult to procure, the same or a less rate of payment given to less educated men forty years ago is still offered, and this, too, at a time when the rural prosperity of the country is less, and consequently lucrative private practice more difficult to obtain.

We need go no further than to say that the Irish Poor-law Medical Service is a service to avoid. To all who contemplate entering it we emphatically say, Don't. So important is it that young medical men should recognise what life in the Poor-law Medical Service means at present, that we quote a short extract from a letter written by a member of it:—"We have no pay practically; no holidays. We are always on duty. We have no pension. We have no promotion. Consequently, every day spent in such a service is one day worse, which, I think, makes it fairly rank as the very worst service of any kind in the world, for any other service leads a man to promotion or pension. In addition, the fact of a man being in this service, as you know, lowers his social status. Everything points to it being a service to be shunned."

Reforms must come finally, but they will only come, as they have come in other services, in consequence of the dearth of candidates.

There are 159 workhouses and about 813 dispensary medical officers, besides apothecaries. The number of vacancies that occur annually averages 100. The salary in this service used to average about £114, but is rapidly coming down, and when it is taken into consideration that in the vast majority of rural districts it is necessary to keep one or more horses, the average area being from forty to sixty square miles, it is plain that there will not be a large margin left from the public emoluments.

The medical officer is also *ipso facto* the registrar of births, marriages, and deaths, and medical officer of health for the district, under the Public Health Act passed in 1873 and amended in 1878. The former office, in country districts, yields between £5 and £10 a year, and the emoluments of the latter appointment in very few cases reach £20, averaging about £12. The medical officer is also vaccinator for the locality, and is required to vaccinate everyone who wishes to come. For each patient a fee of 2s. is paid, along with his salary, by the guardians, and the sum total of those fees varies, according to the populousness of the district, from £4 to £100, an average for the provinces being about £10.

Qualifications.—The qualifications required by the Local Government Board are a licence in surgery, in medicine, and in midwifery; but registration in the *Medical Register*, if effected since the passing of the Medical Act, in 1886, fulfils all requirements. The candidate must also be 23 years of age.

The appointment to both workhouse and dispensary lies with the guardians, who elect by vote. As politics and religious feeling run high in Ireland, these elements enter largely into the election of Poor-law medical officers. Family interests also possesses great weight. In some districts an attempt has been made to insist upon the candidate being a member of the United Irish League. We need not—we trust—point out to any member of the medical profession that to endeavour to obtain a post on such a qualification is to commit an act which is unworthy of his profession.

Duties.—The duty of the dispensary doctor is two-fold. He is to attend his dispensary on a given day or days in the week. Frequently there are two dispensaries in the district, separated from each other by several miles, and he will have perhaps to attend two days a week. He has also to visit at any hour of the day or night a sick person for whose relief a visiting ticket has been issued by a member of the committee or the relieving officer, and to continue his attendance as often as may be necessary to the termination of the case. Moreover, he has a great many registry books to keep and a multitude of returns to make, and in many districts he has to make up all the medicines for the poor.

The pressure of these duties is in a great degree dependent on the goodwill of the guardians. If the medical man be a favourite with his masters they will give him very little trouble with "scarlet runners," as the visiting tickets are, from the colour in which they are printed, humorously called, and will be unwilling to trouble him even with cases deserving of personal attendance. If, on the other hand, it is his misfortune to differ from the guardian in religion or politics, his position may become impossible. He may be peremptorily summoned in any weather, at any hour, and to any distance, to a case which he may probably find to be altogether trivial, or to a person whom he may know to be perfectly well able to pay.

Workhouse Hospitals.—The number of unions in Ireland is 159, to each of which is attached a medical officer, who is appointed and controlled by the board of guardians in the same manner as the dispensary surgeon. The salary is usually better than that of the dispensary doctor, and the duties of a more easy and satisfactory description, inasmuch as they are confined to daily attendance at the workhouse hospitals, and no night visits out of doors or long journeys across the country are involved.

The Irish Lunacy Service.

This service, at present, affords a comfortable livelihood for 22 Resident Medical Superintendents and 32 Assistants. The Superintendents receive salaries and allowances ranging, according to the number of inmates of the asylum, from £500 to £1,000 a year, and the Assistants receive salaries and emoluments averaging about £200 a year. There are also Visiting Physicians receiving about £120 a year, but this class of officer is being allowed to die out, and no new appointments will be made. The Superintendents and Assistants must devote their whole time to their duties.

Heretofore the appointments of Medical Superintendents have been in the patronage of the Lord Lieutenant, but, under the new Local Government Act, they are in the hands of the County Councils, with the proviso that no one shall be appointed who is not a fully registered practitioner with five years' service as Assistant. The Assistant has been, heretofore, appointed by the Board of Governors, and will, in future be appointed by the Committee of the County Council to which the management of the asylum is entrusted. In addition to these officers, there are, in certain larger asylums, Clinical Residents, who receive about £50 a year and full allowances. Those appointments afford excellent introduction to the higher places in the service.

Other Appointments.

There are, in addition to those which we have mentioned, certain emoluments open to medical practitioners in special localities. They are:—

(1) Attendance on the Royal Irish Constabulary. (2) Attendance on the Coast Guards. (3) Factory Surgeoncies. (4) Attendance upon the depot soldiers who are not otherwise provided for.

The Constabulary are paid for at the rate of 2s. per month for each member of the force on duty in the district, including the wives and children of the men but not of the officers. This includes the supply of medicines. The appointment to this position rests with the Inspector-General of the Royal Irish Constabulary, who usually acts upon the advice of the local District Inspectors as to the convenience of the men, and, of course, the emoluments depend on the number of Constabulary stations and the number of men in each.

The Coastguard Service.—The duty of the Medical Officer is to attend the men when sick and to examine candidates either for admission or for superannuation. The fees vary from 5s. to 2s. 6d. per visit. The appointment rests with the Admiralty, but are usually secure for the local Poor law Medical Officer. In this case, also, emoluments depend on the number of stations and men.

Factory Surgeoncies are in the gift of the Chief Inspector of Factories in Whitehall. There is a set scale of payment by the factory owner to the inspector for this work, but we believe it is not adhered to, and, in some districts, at all events, the emolument is a matter of arrangement. The amount depends upon the size of the factory, the position being, in Dublin or Belfast or in other large manufacturing centres, a lucrative one, but in other places scarcely worth taking. The attendance on the military depots is not worth mentioning.

The names of the Professors, Lecturers, and Hospital Staffs of the foregoing Schools and Hospitals, are not included in this place, being found in the advertisement of each Institution, as indicated below.

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Scotland.

Scotland still maintains her educational system at the high level to which it long ago attained, and, with a considerably less numerous population inhabiting her whole area than that of London alone, supports four venerable and historic Universities, each with an honoured past and a magnificent record. The Universities of Edinburgh, Glasgow, Aberdeen, and St. Andrews have sent forth many illustrious graduates in all the different branches of higher learning; few schools can show more gratifying results, and, now that the Carnegie Bequest is in full working order, a University education is within the reach of every Scotch lad, save the very poorest. In Edinburgh and Glasgow those who do not aspire to the honour of a University degree can obtain college diplomas and excellent medical teaching from extra-mural schools of almost equal renown.

The inhabitants of Scotland have always evinced a deeply-rooted dislike for constraint; the regulations of their Universities exemplify this. The student in Scotland is his own master; he lives where he likes, dines where he pleases, and can clothe himself in any kind of garment he chooses. In but one of the Universities have students to don gowns. No doubt the great freedom granted to students occasionally leads to unsatisfactory results, but the advantages which accrue from the system may be held to more than counterbalance the drawbacks. The student is only required by the authorities to attend with due regularity various compulsory classes, to give evidence of diligence in his work, and to conduct himself with proper decorum while within the University precincts. Several halls of residence for students have lately been established, but even here the students are their own masters. Absence of residential colleges implies the absence of college fees, and of the invariable large extras incurred by college life.

The co-existence of teaching and degree-granting universities and extra-mural medical schools in Scotland forms one of the most important factors in the system of medical education in the country. That obtainable at the Universities is the best of its kind, comprising courses on all branches of special medicine and surgery; at the extra-mural schools the special subjects are perhaps even better treated, as they are taught by specialists themselves. In the way of expense, there is little between the University course and the obligatory curriculum for the Licence of the Colleges. The minimum cost for five years' attendance for the licence may be put down at £120, which includes class and examination fees; and at the universities at £146, a difference of about £5 a year only.

Perhaps the one blot upon the Scottish system of medical education at Universities arises from the plan adopted at their professional examinations of delegating the examiners' duties to the professors themselves, along with only one coadjutor for each subject. As University students are now allowed to attend one-half of the total number of courses required for graduation outside the University walls, it happens now and again that those who have done so in a subject, upon which they are examined by the professor teaching it, are placed at a disadvantage in not being thoroughly conversant with subjects specially lectured on by examiners during the preceding session. The examining board for the diploma of the Scottish colleges, indeed, is largely made up of the extra-mural lecturers, but the number assigned to each subject is large enough to avoid the examination of a candidate by his own teacher in the majority of instances.

Apart from the educational attractions offered to students of medicine by the Scottish schools, a very important fact aids to explain the reason why so many students from all parts of the Empire enrol their names in their books: the cost of maintenance is less than in England or Ireland. As a general rule the higher the latitude the cheaper is the living in Great Britain. Edinburgh and Glasgow are more economical than London and Dublin; Aberdeen still less expensive.

THE CARNEGIE TRUST.

Through the munificence of Mr. Andrew Carnegie, LL.D., payment is now made "of the whole or part of the ordinary class fees exigible by the Universities from students of Scottish birth or extraction, and of sixteen years of age or upwards. or scholars who have given two years' attendance, after the age of fourteen years, at State-aided schools in Scotland, or at such other schools and institutions in Scotland as are under the inspection of the Scottish Education Department."

The Trust provides for the payment of the class fees of the above students proceeding to graduation in medicine or science. Application for payment of class fees under the conditions of the Trust should be made to the Secretary, Mr. W. S. McCormick, 2, St. Andrew Square, Edinburgh. By the regulations of the University Commission, one-half of the classes required for University graduation in medicine may be taken extra-murally, and the fees of such extra-mural classes taken in any of the Scotch schools by University students may be paid for by the Trust. In making application for payment of class fees under the conditions of the Trust, students who are desirous of attending classes with lecturers outside the University must state this fact to the Secretary and request to be provided with "Form 2."

UNIVERSITY OF EDINBURGH.

Four degrees in medicine are granted: Bachelor of Medicine (M.B.), Bachelor of Surgery (Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch M.). The first two must be taken together, the last two may be taken separately.

No one is admitted to the degrees of Bachelor of Medicine and Bachelor of Surgery who has not been engaged in medical and surgical study for five years, after passing a preliminary examination in general knowledge in accordance with the medical ordinances. A degree in arts or science of a British or other recognised University is held to supersede such preliminary examination. The subjects included in this general examination are English grammar and composition, English history and geography, Latin, arithmetic, and the elements of mathematics, and, in addition, as optional subjects, Greek, French, or German.

The *annus medicus* of each year is held to be constituted by at least two courses of not less than one hundred lectures each, or by one of such course, and two courses of not less than fifty lectures each, exclusive of the clinical courses, in which lectures are given twice a week during prescribed periods. Two years of the five must be spent at the University, the remaining three years at any University of the United Kingdom, or other Universities or Medical Schools recognised by the University Court.

During the first four years the student must attend elementary botany, elementary zoology, physics, practical chemistry, practical physiology, practical pathology, and medical jurisprudence during courses of not less than 2½ months each; public health, not less than thirty lectures; practical anatomy during two courses of not less than five months each; chemistry, anatomy, physiology, pathology, surgery; materia medica and therapeutics, medicine, and midwifery and the diseases of women and children during courses of not less than five months each. Eight of these subjects must be taken at a University or college affiliated to a University, entitled to grant the degree of M.D. He must attend a course of twenty-five meetings on practical pharmacy in a University or recognised school of medicine, or have dispensed drugs for a period of three months in a hospital or dispensary, or in an establishment recognised by the Pharmaceutical Society. He must attend a nine months' course in clinical medicine and in clinical surgery. During the fifth or final year he must be engaged in clinical study for at least nine months. In all, before graduation he must have attended for at least three years a hospital which accommodates no fewer than 80 patients, and possesses a distinct staff of physicians and surgeons, and he must have acted as clerk in the medical and dresser in the surgical wards of such a hospital, and the practice of a dispensary, or of a physician and surgeon. He must also have had approved opportunities of studying (1) operative surgery, (2) mental diseases at a recognised asylum, (3) at a recognised hospital, post-mortems, fevers, and diseases of the eye, and (4) one of the following: Diseases of children, of the ear, nose and throat, or of the skin, (5) vaccination.

He must personally attend at least twelve cases of labour under the superintendence of a registered medical practitioner, or six such cases, and, for at least three months, the practice of a midwifery hospital in which practical instruction is regularly given.

Every candidate must deliver on or before the date for lodging certificates for the final examination (in 1903, April 16th) to the Dean of the Faculty of Medicine—

1. A delaration in his own handwriting that he has completed his twenty-first year. or that he will have done so on or before the day of graduation, under article of apprenticeship to any surgeon or other master. (This declaration, along with a statement of studies, is appended to the schedule for the final examination, and must be signed before the schedule is given in.)

2. A statement of his studies, as well in literature and philosophy as in medicine, accompanied with proper certificates.

Each candidate is examined both in writing and *viva voce*:—

1. Zoology, botany, physics, and chemistry.
2. On anatomy, physiology, and materia medica, and therapeutics.
3. On pathology.
4. On medicine, surgery, midwifery, forensic medicine, and public health.

The examinations in anatomy. chemistry, physiology, botany, and zoology, materia medica and pathology, are conducted, as far as possible, by demonstration of objects placed before the candidates.

Candidates who are ready to submit to an examination in the subjects comprised in the first division, viz., botany, zoology, physics, and chemistry, may be admitted to examination in all or any two of these subjects at any examination held after they have attended a full course in each of the subjects professed.

Candidates who have passed their examination in the subjects in the first division may go up for examination in those of the second division at the end of their third winter session, but may postpone their examination in materia medica and therapeutics until the close of the summer session following.

Candidates who have passed the first and second divisions may be examined in the third division at the end of the fourth winter session.

Candidates who have passed their examinations in the subjects comprised in the first, second, and third divisions may be admitted to examination in the fourth or final division, when they have completed the fifth year of study.

The degree of Doctor of Medicine may be conferred on any candidate who has obtained the degrees of Bachelor of Medicine and Bachelor of Surgery, and who is of the age of twenty-four years, and who produces a certificate of having been engaged, subsequently to his having received the degrees of M.B. and Ch.B., for at least one year in attendance on a hospital, or in scientific work bearing directly on his profession, or in the Military or Naval Medical Services, or for two years in practice other than purely surgical. The candidate shall submit to the Faculty of Medicine a thesis certified by him to have been composed by himself, and which shall be approved by the Faculty, on any branch of knowledge comprised in the professional examinations for the degrees of Bachelor of Medicine and Bachelor in Surgery, which he may have made a subject of study after having received those degrees. The candidate will also be examined in clinical medicine and must show practical acquaintance with advanced methods of diagnosis; he *may* take, at option, gynæcology, mental diseases, or diseases of children for one of his three cases. The degree of M.D. is conferred on holders of the degrees of M.B. C.M. (old regulations), on the submission of a thesis approved by the Medical Faculty, provided that the candidate shall have passed the medical preliminary examination in the subjects of Greek and logic, or moral philosophy. Should the candidate elect to do so, he may, however, take the M.D. degree under the new regulations, *i.e.*, substituting an examination in clinical medicine for that in Greek and logic. This course is usually pursued by those who did not pass in these subjects with the rest of their preliminary examinations.

The regulations for the degree of Ch.M. are very similar, the candidate being examined in surgical anatomy, operations on the dead body, clinical surgery, and some of the special branches.

Candidates settled abroad, who cannot appear personally to receive the degree, may, after satisfying the Senatus to that effect, have the degree conferred on them *in absentia*.

Fees:—The fee to be paid for the degrees of Bachelor of Medicine and Bachelor of Surgery is twenty-two guineas, and the proportion of this sum to be paid by a candidate at each division of the examination is registered from time to time in the University Court. The fee for the degree of Doctor of Medicine or of Master of Surgery is ten guineas (old regulations, £5 5s.)

The total expenses of the curriculum, including examination and matriculation fee, is £146.

Bursaries and Scholarships open for Session 1902-1903: Among the bursaries and scholarships open during the ensuing year are:—Town Council Bursaries, some of which may be held in the medical faculty. Early application to the City Clerk, Council Chambers, Edinburgh. McCosh Graduates' Bursary and McCosh Medical Bursary for prosecution of research abroad, tenable for one year. Applications to Dean of Medical Faculty by end of July. Two Mackie Bursaries for students in second and third years, whose pecuniary circumstances need assistance. Applications to Dean by October 1st. Four Buchanan Bursaries. Two Sibbald Bursaries of £30 a year for three years, particulars from Messrs. Mackenzie, Innes, and Logan, W.S., 23, Queen Street, Edinburgh, before September 15th. Two Thomson Bursaries of £25 for four years, one conferred at each preliminary examination in October and March. Five Grierson Bursaries (natives of Crawford and Leadhills have a preference). Names must be sent in before October 1st. Two John Aitken Carlyle Bursaries of £28 for one year for proficiency in class examinations in anatomy and chemistry or physiology. Four Mackenzie Bursaries of £20 in practical anatomy. Renton Bursary of £20, for one year, for students attending classes of natural physiology, mathematics, chemistry, or political economy, who also can show they are in need of pecuniary aid. Names to be sent to Secretary before September 18th. Two Crichton Bursaries of £50, for four years, one competed for at each preliminary examination. Murchison Memorial Scholarship of the interest from £1,000, to take place in Edinburgh in the summer of 1903; Buchanan Scholarship of £40 10s., for proficiency in midwifery and gynæcology, as shown by class work and in the final examination. Other scholarships are:—The James Scott, £42 10s. annually, in midwifery; the Ettles, £31 5s. annually to the most distinguished graduate; two Hope Prizes, £30 annually, in chemistry; two Crichton, £100 annually, in anatomy and physiology. Three Vans Dunlop Scholarships in anatomy and physiology, materia medica and pathology and medical jurisprudence, value £100. Mouat Scholarship in practice of physic, about £55. Thomson Scholarship of £40, for four years, in botany, zoology, and mechanics, for students beginning first winter's session. Apply to Traquair, Dickson, and Maclaren, W.S., 11, Hill Street, Edinburgh, before September 20th. Houldsworth Scholarship in Pharmacology, £40. Syme Surgical Fellowship, £102. Goodsir Memorial Fellowship, £100. Full particulars of these and other prizes may be found in the "University Calendar" (published by Mr. Thin, South Bridge, Edinburgh).

Graduation in Science: The University of Edinburgh also possesses a Faculty of Science which may confer two degrees, Bachelor of Science (B.Sc.), and Doctor of Science (D.Sc.). These degrees are given in pure science and in applied science. Candidates for the degree of B.Sc. in pure science must attend at least seven courses of instruction in the subjects selected by them during the course of not less than three academical years. Three of these courses must be on subjects prescribed for the first science examination, and four on those for the final examination. Four of these courses must be taken in the University of Edinburgh. The subjects for the first science examination are:—1, Mathematics or biology (first professional in medicine not accepted as equivalent to latter); 2, Natural philosophy; 3, Chemistry. For the second examination they may be selected from among the following: Mathematics, physics, astronomy, chemistry, anatomy, physiology, geology, zoology, and botany. Graduates as B.Sc. may, after five years, proceed to the degree of D.Sc., undergoing an examination in the subjects chosen, and presenting a thesis founded on original work.

Graduation in Public Health: Similar degrees are conferred in Public Health. Candidates must be graduates in medicine of a university recognised by the University Court, and must matriculate for the year in which they proceed for examination. Before proceeding to the first examination they must produce evidence that (1) they have worked at least twenty hours a week during a period of not less than eight months, after taking their medical degree, in a recognised Public Health laboratory. Five of these months must be spent consecutively in the Public Health Laboratory of the University of Edinburgh, and (2) have attended a course of lectures on physics in addition to that qualifying for graduation in medicine, and one, of at least three months' duration, on geology, such as the Senatus may approve of.

Candidates for the second examination of B.Sc. in Public Health are not admitted until at least eighteen months have elapsed after having passed M.B., Ch.B., or sooner than six months after the first examination. They must have attended two separate courses of Public Health, of at least forty lectures each, one dealing with medicine, the other with engineering, each in its relation to public health, in such manner as the Senatus shall determine. They must also have studied practical sanitary work under a Medical Officer of Health for six months, have had three months' clinical instruction in a recognised fever hospital, and three months' instruction in mensuration and drawing.

Full details of the subjects included in the different courses are given in the official programme of the Faculty of Science, which may be obtained from the University (price 2d.).

In a similar manner to that described under degrees in pure science, a B.Sc. may after five years proceed to take the degree of D.Sc. in Public Health.

Fees for Science Degrees: B.Sc., first examination, £3 3s.; B.Sc., second examination, £3 3s.; D.Sc., £10 10s.; total, £16 16s.

University Hall, Edinburgh.—In an educational number it is worth while to call attention to the advantages now offered to students coming to Edinburgh to study, in the shape of social residences akin to, though very much less pretentious than, the English University Colleges. During the past six years several buildings have been acquired in Edinburgh for this purpose, in which students can live in a self-governing community. In each house there are private studies with or without bedrooms, and common sitting and dining rooms. The charges vary from 7s. 6d. to 22s. 6d. per week. The residents elect a treasurer from among their number who acts as intermediary between them and the housekeeper or servants. It is a satisfactory indication of the comfort of the Hall that several graduates now live in it and are willing to help or coach the undergraduates for moderate fees. To gain admission two references must be produced from past or present residents. These are considered and voted on at a house meeting. In all disputed points Professor Geddes is the referee, while Dr. Ricardo Stephens is the rent treasurer, who will supply any further information required. The Hall is an admirable place for parents to send their sons to. Any unruly member may be expelled by a meeting of the residents similar to that held for elective purposes.

Medical School for Women.—The Medical Teaching of Women in Edinburgh is carried on by the Scottish Association for the Medical Education of Women (the Secretary, Minto House, Chambers Street). The classes are conducted by the lecturers of the Medical School of the Royal Colleges, and qualify both for the Edinburgh University degree and for the Licence of the Triple Board. The classes are for women alone. The University of Edinburgh does not recognise certificates presented by female candidates for mixed classes without special cause shown. Women students are eligible for the benefits of the Carnegie Bequest.

UNIVERSITY OF GLASGOW.

The University of Glasgow is both a teaching and an examining body, but admits to examination only those candidates whose course conforms to its own regulations. Within certain limits provision is made for accepting instructions given by recognised medical schools and teachers; but eight of the subjects other than clinical must be taken in this or some other recognised University entitled to confer the degree of M.D., and at least two years of the course must be taken in Glasgow University. Under the new regulations, laid down in Ordinance No. 14, Glasgow No. 1, of the Commissioners under the Universities (Scotland) Act, 1889, four degrees, open both to men and to women are conferred—M.B. and Ch.B. (always conjointly), M.D. and Ch.M. A preliminary examination must be passed in (1) English, (2) Latin, (3) Elementary Mathematics, and (4) Greek French, or German, with possible option to students whose native tongue is not English in the case of the fourth subject, and on passing students must register in the books of the General Medical Council. By a regulation recently enacted, it is no longer compulsory to pass in all the four preliminary subjects at once, and they may now be passed at two stages. For M.B. and Ch.B. a curriculum of five years is required. The curriculum closely resembles that at Edinburgh. The "University Calendar" should be consulted for details.

The fees for M.B. and Ch.B. are £23 2s., and the present fee for hospital attendance is £21. The fee for M.D. is £10 10s., and for Ch.M. is £10 10s.

Bursaries and prizes to the annual amount of about £900 are appropriated to medical students, including an Arthur bursary for women, £25 for three years.

Several bursaries open to students in any faculty are not infrequently held by medical students, and scholarships and fellowships to the annual amount of £1,600 may be held by medical students who have gone through the Arts course.

Queen Margaret College for Women.—Founded in 1883 (by the Glasgow Association for the Higher Education of Women, which was formed in 1877 with the object of bringing university instruction, or its equivalent, within the reach of women), Queen Margaret College in 1890 added to its Faculty of Arts a School of Medicine for Women. This was organised entirely on university lines, and with the view of preparing for university degrees; and when, in 1892, in consequence of the Ordinance of the University Commissioners authorising the Scottish Universities to admit women to instruction and graduation, Queen Margaret College became the Women's Department of the University of Glasgow, its classes in medicine taken previously to its incorporation with the University were recognised as preparing for the degree. A full course of study for M.B. and Ch.B. is given by University Professors and Lecturers, with excellent facilities for hospital and dispensary work in the Royal Infirmary and other hospitals. A Hall of Residence for the students was founded six years ago. Fees for the classes at Queen Margaret College may be paid by the Carnegie Trustees.

UNIVERSITY OF ABERDEEN.

The University of Aberdeen possesses under its charters the amplest privileges claimed or enjoyed by any academical institution. It confers degrees in the five faculties of Arts, Science, Divinity, Law, and Medicine. It also grants diplomas in Public Health, Agriculture, and in Education. It is, moreover, a teaching body equipped with twelve distinct chairs in the various branches of medicine and surgery, besides a Lectureship in Tropical Medicine. The majority of the professors devote their whole time to the work of the chairs. There are fully-equipped laboratories, the accommodation for which has recently undergone considerable extension. The degrees of M.B. and Ch.B. are conferred together; they cannot be obtained separately. The curriculum of study is nearly the same as in the University of Edinburgh; the regulations in the preceding columns will therefore apply here. Two years must be passed at Aberdeen. With regard to fees, each candidate for the degrees of M.B. and Ch.B. must pay a fee of £5 5s. in respect of each of the first three professional examinations, and £7 7s. for the final examination. Class fees, £3 3s. each. Total cost, exclusive of the fees for degrees, is about £100. Besides the Royal Infirmary, students have the opportunity of attending several other local institutions where special courses of instruction are given. Perpetual fee for hospital practice is only £6. The professional examinations are held twice in each year, namely, in March and July, directly after the close of the winter and summer sessions.

Bursaries.—Bursaries, Scholarships, and Fellowships to the number of fifty, and of the annual value of over £1,150, may be held by students of medicine. See "University" Calendar.

The Degree of M.D.—The degree of Doctor of Medicine may be conferred on any candidate who has obtained the degrees of M.B. and C.M. (Old Regulations), is of the age of twenty-four years, and has been engaged subsequently to his having received the degree of M.B. for two years in attendance in a hospital, or in military or naval medical service, or in medical or surgical practice, and has presented a thesis which has been approved of by the Medical Faculty. Candidates for the degree of M.D. (New Regulations) are required to pass an examination in clinical medicine in addition to presenting a thesis. Similar regulations apply to a degree of Ch.M. (Master of Surgery).

A Diploma in Public Health is conferred after examination on graduates in medicine in any university in the United Kingdom. Regulations may be seen in the Calendar, or obtained on application to the Secretary of the Medical Faculty.

Aberdeen Royal Infirmary.—This is a well-equipped institution, containing 240 beds, and affords excellent opportunities for clinical study to students at the Aberdeen University. The city, moreover, offers inducement in the way of cheaper living and comparative quiet to that obtained in Edinburgh and Glasgow, and will doubtless be preferred by some on this account.

ST. ANDREWS UNIVERSITY.

United College St. Andrews and University College, Dundee.

This University (session opens October 9th) grants the degrees of M.B., Ch.B., M.D., and Ch.M. The degrees of the University are open to either sex. For the degree of M.B., Ch.B., two of the five years of medical study must be spent in the University of St. Andrews; the remaining three may be spent in any University of the United Kingdom, or in any foreign, Indian, or Colonial University recognised for the purpose by the University Court, or in such medical schools or under such teachers as may be recognised for the purpose by the University Court. The preliminary examination and the professional examinations are of the same character as in the other Scottish Universities. A Diploma in Public Health is also granted by the University of St. Andrews to graduates in medicine of any University in the United Kingdom. Twelve months must elapse between the date of graduating in medicine and entering for the examinations for the diploma. The course of study required consists of (1) a six months' course of practical chemistry, bacteriology, and the pathology of diseases transmissible from animals to man in a laboratory of the University of St. Andrews; (2) six months work with a medical officer of health; (3) three months clinical instruction in infectious diseases. Subjects for first examination:—Chemistry, physics, bacteriology, and meteorology. Second examination:—Sanitation, sanitary law, vital statistics, medicine in relation to public health.

University College, Dundee, was affiliated and made to form part of the University of St. Andrews on January 15th, 1897, and the whole medical curriculum may be taken in the College. The United College, St. Andrews, offers classes for the first two years of professional study.

Bursaries and Scholarships.

United College, St. Andrews.—Two Berry bursaries of £40 tenable for three years, open to men for arts, science, or medicine. Fourteen Taylor Thompson bursaries £50 to £30 tenable for one year, partly for two, open to women only proceeding to graduate in medicine.

University College, Dundee.—Eleven entrance bursaries of £15, open to women for arts, science, or medicine, tenable for one year. Four £20 and three £15 second year bursaries for men or women in arts, science, or medicine tenable for one year. Four £20 and two £15 third year bursaries for men or women in arts, science, or medicine, tenable for one year. Two Educational Trust Bursaries of £25, tenable for three years. Applicants must have attended a public or State aided school in Dundee for at least one year before examination. Bute Bursary annual income from £1,000 (men only).

Preliminary Examinations.—The dates of the next two examinations are September 27th, 1902, and March 28th, 1903. Schedules (obtainable from the Secretary of the University) to be returned filled up, and fees paid by September 14th, 1902, or March 9th, 1903.

Fees for Degrees.—Total fees for M.B., Ch.B., are the same as at other Scottish Universities, *i.e.*, 22 guineas (payable in instalments). Fee for the degree of M.D., and also for that of Ch.M., is 10 guineas in each case. For the Diploma of Public Health Examinations the fee is £5 5s. for each of the two examinations.

Class Fees.—The fee payable in each of the following separate classes is 3 guineas, viz., in Chemistry, Practical Chemistry, Physics, Zoology, Botany, Physiology, Practical Physiology, Anatomy, Practical Anatomy.

University College, Dundee.—*Class Fees.*—The fee payable in each of the following separate classes is 3 guineas, viz., in Chemistry, Practical Chemistry, Physics, Zoology, Botany, Physiology, Practical Physiology, Anatomy, Practical Anatomy, Materia Medica, Practical Pharmacy, Pathology, Practical Pathology and Bacteriology, Medical Jurisprudence and Public Health, Medicine, Surgery, Operative Surgery and Midwifery.

In Clinical Medicine, Clinical Surgery, Opthalmology, Diseases of Throat and Ear, and Mental Diseases the class fees are 2 guineas each, and in Fevers 1 guinea. For the Chemistry required for the D.P.H. the fee is 7 guineas. A special class is also held for the D.P.H., for which the fee is 3 guineas.

Dundee Royal Asylum.—The appointments include a qualified resident assistant and two resident clinical clerks. Clinical instruction is given.

Further information will be found in the Calendar of the University, published by Messrs. Blackwood and Sons, Edinburgh, or can be had of the Dean of the Medical Faculty, Professor Weymouth Reid, F.R.S.

Dundee Royal Infirmary.—The Infirmary contains 300 beds, with a special ward for the treatment of children. Three resident qualified assistants are appointed annually. Clinical clerks and dressers are attached to the physicians and surgeons, and students are appointed to assist in the post-mortem room. Out-patients are seen daily at 9 a.m. The instruction given at the Infirmary is recognised for purposes of graduation by the Scotch Universities, the University of London, the University of Cambridge, the Royal University of Ireland, and by the Royal Colleges of England and Scotland. Hospital Ticket for the Infirmary, £2 2s each session, or £3 3s. a year. Further information on application to the Medical Superintendent.

THE COLLEGES.

The Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow have made arrangements by which, after a series of examinations the student may obtain the diploma of the co-operating bodies.

The holders thereof are enabled to register three diplomas under the Medical Acts, viz., Licentiate of the Royal College of Physicians of Edinburgh, Licentiate of the Royal College of Surgeons of Edinburgh, and Licentiate of the Faculty of Physicians and Surgeons of Glasgow. The diplomas are also recognised by the Army, Navy, and other public bodies.

The three co-operating bodies grant their *single* qualifications only to candidates who are already registered as possessing another and opposite qualification in medicine and surgery, as the case may be.

Regulations of the Conjoint Board of the Royal College of Physicians of Edinburgh and the Royal College of Surgeons of Edinburgh and the Faculty of Physicians and Surgeons, Glasgow.—The candidate must produce certificates of having attended the following separate and distinct course of lectures, the certificate distinguishing the sessions and the schools in which the courses were severally attended. Anatomy, one course, six months. Practical anatomy, twelve months. Chemistry, one course, six months. Practical or analytical chemistry, one course, three months. Materia medica, one course, three months. Physiology, one course, six months. Practice of medicine, one course, six months. Clinical medicine, nine months. Principles and practice of surgery, one course, six months. Clinical surgery, nine months. Midwifery and diseases of women and children, one course, three months. Medical jurisprudence, one course, three months. Pathological anatomy, one course, three months. The candidates must also produce the following certificates:—(*a*) Of having attended not less than six cases of labour under the superintendence of the practitioner who signs the certificates, who must be a registered medical practitioner. (*b*) Of having attended for three months, instruction in practical pharmacy. The certificate to be signed by the teacher, who must be a member of the Pharmaceutical Society of Great Britain, or the Superintendent of the laboratory of a public hospital or dispensary, or a registered practitioner who dispenses medicine to his patients, or a teacher to a class of practical pharmacy. (*c*) Of having attended for twenty-four months the medical and surgical practice of a public general hospital, containing on an average at least eighty patients, and possessing distinct staffs of physicians and of surgeons. (*d*) Of having attended, for six months, the practice of a public dispensary specially recognised by any of the co-operating bodies; of having been engaged for six months as visit-assistant to a registered medical practitioner. (*e*) Of having been instructed in vaccination.

First Examination, Fee £5.—The first examination shall embrace chemistry, comprising the following particulars:—Chemical physics, heat, light, and electricity; the principal non-metallic and metallic elements, and their more common combinations, also the leading alcohols, organic acids, ethers, carbohydrates, and alkaloids; the candidates will also be examined practically in testing; physics and elementary biology. The first examination shall take place not sooner than the end of the first year, including a winter and summer session. Candidates who desire to enter for the first professional examination must apply to the Inspector of Certificates on or before the Friday preceding the day of examination, and must produce certificates of attendance on one course of chemistry, one course of practical chemistry, one course of anatomy, and six months' practical anatomy.

Second Examination, Fee £5.—The second examination shall embrace anatomy and physiology, and shall not take place before the termination of the summer session of the second year of study. Candidates must produce to the inspector certificates of attendance on the prescribed courses of anatomy, practical anatomy, and physiology.

Third Examination, Fee £5.—Comprises the subjects of pathology, materia medica, and pharmacology and advanced anatomy.

Final Examination, Fee £15.—The final examination shall embrace the principles and practice of medicine (including therapeutics and medical anatomy, clinical medicine); the principles and practice of surgery (including surgical anatomy and surgical pathology); clinical surgery; midwifery and gynæcology, medical jurisprudence and hygiene; and shall not take place before the termination of the full period of study.

Subjects of Preliminary Education: (1) English language, including grammar and composition; (2) Latin, including grammar, translation from specific authors, and translation of easy passage not taken from such authors; (3) elements of mathematics, comprising (*a*) arithmetic, including vulgar and decimal fractions; (*b*) algebra, including simple equations; (*c*) geometry, including the first two books of Euclid; (4) elementary mechanics of solids and fluids, comprising the elements of statics, dynamics, and hydrostatics; (5) one of the following optional subjects:—(*a*) Greek; (*b*) French; (*c*) German; (*d*) Italian; (*e*) any other modern language; (*f*) logic; (*g*) botany; (*h*) zoology; (*i*) elementary chemistry.

Qualification in Public Health: The College of Physicians, in association with the Royal College of Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow, confers a certificate of competency in public health. The examinations are held in April and October. Fee, £10 10s.

For the special regulations of the Royal College of Surgeons of Edinburgh, intending candidates should apply to Mr. James Robertson, 48, George Square, Edinburgh; and for those of the Royal College of Physicians, to Dr. R. W. Philip, 45, Charlotte Square, Edinburgh.

The Fellowship of the Royal College of Physicians of Edinburgh is conferred only by election, and the candidate must have been a member of the college for at least three years previously, and have attained the age of twenty seven years.

The membership is conferred only on a licentiate of a college of physicians or graduate in medicine of a British or Irish university provided he shall have attained the age of twenty-four years and shall have passed an examination (1) On the principles and practice of medicine, including therapeutics; (2) on one of the following subjects to be selected by the candidate, *in which a high standard of proficiency is expected:—(a)* one or more departments of medicine specially professed; *(b)* psychological medicine; *(c)* pathology; *(d)* medical jurisprudence; *(e)* public health; *(f)* midwifery; *(g)* gynæcology. The examination is of a searching character extending over three days, the first of which is devoted to the examination of patients, *viva voce* and practical examination on methods of diagnosis —*e.g.*, microscopy of blood, clinical bacteriology, quantitative analysis, &c., and written commentary on a case examined. The second day is taken up by written papers, and the third by practical examination on special subject and orals.

The fee for membership is 35 guineas, for fellowship 38 guineas, with a stamp duty of £25—£101 13s. in all.

The licence, or single qualification in medicine, is conferred on candidates who already possess a recognised qualification in surgery. The examinations of this licence are held on the first Wednesday of each month, save those of September and October, on medicine, materia medica, midwifery, and medical jurisprudence. The fee is £15 15s., and intending candidates should communicate with the Secretary of the College at least eight days before the date of examination.

The Fellowship of the Royal College of Surgeons of Edinburgh is conferred (except under certain conditions as to age and professional standing) only on candidates who have passed a special examination, and have previously obtained a diploma from the college, or from either of the Colleges of Surgeons of England or Ireland, or the Faculty of Physicians and Surgeons of Glasgow, or the surgical degrees of the Universities of Great Britain, and who are twenty-five years of age. The subjects for examination for those who are already Licentiates of the College are on the principles and practice of surgery, clinical and operative surgery, and one optional subject.

Those who are not Licentiates of this College: on principles and practice of surgery, clinical and operative surgery, surgical anatomy, and one optional subject; and in such supplementary subjects as have not, in an adequate manner, been included in the examination for the registrable surgical qualification possessed by such candidates, and which are required in the examination for Licentiates of this College.

The optional subjects shall embrace: (*a*) Surgery, special branches; (*b*) advanced anatomy and physiology; (*c*) surgical pathology and morbid anatomy; (*d*) midwifery and gynæcological medicine and surgery; (*e*) medical jurisprudence and hygiene; (*f*) practice of medicine and therapeutics. The examinations are written, oral, and practical. Three weeks' notice must be given to Mr. James Robertson, from whom full particulars as to certificates required may be obtained. The fee is £30 for those who hold the diploma of Licentiate of the College, and £45 to others (no stamp duty is payable on the diploma). Registered practitioners, aged not less than 40, who have been in practice for not less than ten years, and who have highly distinguished themselves by original investigations, may under special circumstances be elected without examination. Women are not admitted to the Fellowship.

Licence.—The examination embraces the principles and practice of surgery (including operative surgery and surgical pathology), clinical surgery, and surgical anatomy, and shall not take place before the termination of the full period of study. Fee £15 15s.

Wood Bursary.—The examination for the Wood Bursary, of £60 per annum, tenable for three years, will take place on October 21st and 22nd, at the college. The subjects will be found in our advertising columns.

Dental Diploma.—Every candidate for the dental diploma must have attended the general lectures and courses of instruction required at a university or an established medical or dental school recognised by the College as qualifying for the diploma in surgery. The fee is £10 10s.

Edinburgh Royal Infirmary.—Clinical instruction is afforded at this institution, which contains 780 beds in the building, and 10 beds in a convalescent home under the supervision of professors of the university, and the ordinary physicians and surgeons of the infirmary. Special instruction is given on diseases of women, physical diagnosis, and diseases of the eye, ear, throat and teeth, Separate wards are devoted to venereal diseases, diseases of women, diseases of the eye, also to cases of incidental delirium or insanity, and three wards are specially set apart for clinical instruction to women students. Post-mortem examinations are conducted in the anatomical theatre by the pathologists, who also give practical instruction in pathological anatomy and histology. The perpetual fee, on one payment, £12; the annual fee, £6 6s.; half-yearly £4 4s.; quarterly, £2 2s.; monthly, £1 1s. Separate tickets amounting to £12 12s. entitle the student to a perpetual ticket. No fees are payable for any surgical or medical appointment.

The appointments are as follows:—

1. Resident physicians and surgeons are appointed and live in the house free of charge. There is no salary. The appointment is for six months, but may be renewed at the end of that period by special recommendation.

2. Special non-resident clerks (in the special subjects and for out-patient work) are appointed for six months. These also may be similarly renewed.

3. Clerks and dressers are appointed by the surgeons and physicians. These are open to all students and junior physicians holding hospital tickets.

4. Assistants in the pathological department are appointed by the pathologists to conduct post-mortem examinations in the anatomical theatre.

SCHOOL OF MEDICINE OF THE ROYAL COLLEGES, EDINBURGH.

The government of this school, established in 1505, is now vested in a board which is equally representative of the two Royal Colleges and the Lecturers, the school being styled "The School of Medicine of the Royal Colleges, Edinburgh." Each lecturer on a qualifying subject is required to pass a special examination before he is licensed by the Royal College to which he belongs, and in order to give a course qualifying for University graduation he must further be recognised by the University Court. In every case, the lecturer must satisfy the Royal Colleges and the University that he has adequate rooms and appliances for the teaching of his special branch of study. The present number of lecturers is fifty-seven, of whom the greater number deliver qualifying courses of instruction of the same duration and scope as those delivered within the University, while a large number of non-qualifying courses on special subjects of interest to medical science, but which are not required for graduation, are delivered both in the winter and summer sessions. The students who attend the classes of the School of Medicine are largely students proceeding to the University degree, as well as those who are intending to take other qualifications, such as the triple qualification of the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow; that of the Royal College of Physicians of London, and the Royal College of Surgeons of England, and the degrees of the different Universities. The number of students attending the school averages 1,300 annually. Courses of lectures on special non-qualifying branches of study have for the last quarter of a century formed a marked feature of the school. In Edinburgh such special subjects could only be studied extra-murally until the University recently appointed from the teachers of this school lecturers on diseases of the eye, insanity, and diseases of children to conduct classes in the University.

The minimum cost of the education in the School of Medicine for the triple qualifications of physician and surgeon from the Royal Colleges of Physicians and Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow, including the fees for the joint examinations, is about £115, which is payable by yearly instalments during the period of study.

The Winter Session opens October 1st. The secretary, Mr. R. N. Ramsay, 24, Forest Road, Edinburgh, will forward the School Calendar *gratis* to inquirers.

GLASGOW EXTRA-MURAL SCHOOL.

St. Mungo's College and Glasgow Royal Infirmary.—This college was incorporated in 1889 under its new title, being formerly known as the Glasgow Royal Infirmary School of Medicine. The Medical Faculty occupies buildings erected for the purposes of the medical school in the grounds of the hospital, and the laboratories, museums, and lecture rooms are of the most approved description. Attendance on the classes in St. Mungo's College qualifies for the medical degrees of the Universities and the medical and surgical colleges in accordance with their regulations.

The Royal Infirmary, which is at the service of the College for teaching purposes, is one of the largest general hospitals in the kingdom. It has 612 beds available for clinical instruction, including an ophthalmic department, and it has special wards for diseases peculiar to women, for venereal diseases, erysipelas, burns, and diseases of the throat. At the dispensary special advice and treatment are given in diseases of the eye, ear, teeth, and skin, in addition to the large and varied number of ordinary medical and surgical cases—about 62,000 per annum—which in a great industrial centre daily require attention. Students at the college and hospital get the benefit of dispensary experience free of charge, and no better or wider field for seeing hospital practice and receiving clinical experience can be found than in the Glasgow Royal Infirmary.

Appointments.—All appointments are open. There are five physicians' and seven surgeons' assistants, who obtain free board and residence in the hospital and act in the capacity of house physicians and house surgeons, and there is an assistant to the gynæcologist, who boards but does not reside in the hospital. There is also a house surgeon for the ophthalmic department. These appointments are made for six months, and are open to gentlemen who have a legal qualification in medicine and surgery. Clerks and dressers are appointed by the visiting physicians and surgeons. From the large number of cases of acute diseases and accidents of varied character received, these appointments are valuable to students. In the pathological department assistants are also appointed by the pathologist.

Fees.—The fees for Lectures, including Hospital attendance necessary for candidates for the Diplomas of the English, Scotch, and Irish Colleges of Physicians and Surgeons, amount to £72.

Anderson's College Medical School, Glasgow.—New and excellently equipped buildings were opened in October, 1877, in Dumbarton Road, immediately to the west of the entrance to the Western Infirmary, and within four minutes' walk of the University. Extensive laboratory accommodation is provided for practical anatomy, practical chemistry, practical botany, practical zoology, practical physiology, practical pharmacy, operative surgery. There are also provided a library and reading room, and a students' recreation room. The buildings are constructed upon the most approved modern principles. The dissecting room is open in winter from 9 a.m. to 6 p.m., and in summer from 6 a.m. to 6 p.m. These students are assisted in their dissections by the professor and demonstrators, by whom daily examinations and demonstrations on the parts dissected are conducted. The supply of subjects is ample, and students are consequently provided with parts as soon as they may be ready for them. The dissecting room is provided with a complete series of dissecting specimens mounted in plaster of Paris illustrating the anatomy of the human body. There is also a large Bone Room, furnished with complete sets of painted and unpainted bones.

Class Fees.—For each course of lectures (anatomy, ophthalmic medicine and surgery, aural surgery, diseases of throat and nose, and mental diseases excepted), first session, £2 2s.; second session (in Anderson's College), £1 1s.; afterwards free. For practical classes (except anatomy), viz., chemistry, botany, zoology, physiology, pharmacy, operative surgery, first session, £2 2s.; second session, £2 2s.

Anatomy Class Fees.—Winter: First session (including practical anatomy), £4 4s.; second session (including practical anatomy), £4 4s.; third session, £2 2s. To those who have had the necessary courses of practical anatomy, the fee will be £1 1s. Summer: Lectures and practical anatomy, £2 12s. 6d.

Western Infirmary.—Fees: For hospital attendance, first year, £10 10s; afterwards free. For each clinical class, in winter, £3 3s.; in summer, £2 2s. After three such annual payments of £5 5s the fee for each clinical class will be £1 1s. Pathology, each course, £3 3s. Vaccination fee, £1 1s.

Royal Infirmary.—Fees: Hospital practice and clinical instruction, first year, £10 10s.; second year, £10 10s.; afterwards free. Six months, £6 6s.; three months, £4 4s.; pathology, both courses, £4 4s.; vaccination fee, £1 1s.

Dental Curriculum.—Students studying with a view to the dental diploma can obtain instruction in the following subjects: Physics, chemistry, anatomy, physiology, surgery, practice of medicine, and materia medica. The special dental courses may be obtained in the Dental School, 5, St. Vincent Street, Glasgow.

POST-GRADUATE COURSES IN SCOTLAND.

In Edinburgh a number of post-graduate courses continue more or less throughout the year. Among them are:

1. Ophthalmology: Daily at the Royal Infirmary. 2. Ophthalmoscopy: Dr. George Mackay, Eye Dispensary,

Lauriston Place, fee £2 2s.; Dr. W. G. Sym, Eye, Ear, and Throat Infirmary, Cambridge Street, fee £2 2s.; Mr. J. V. Paterson, Eye, Ear, and Throat Infirmary, Cambridge Street, fee £2 2s. 3. Aural Surgery, &c,: Dr. Macbride and assistants, Royal Infirmary; Dr. Hunter Mackenzie, Eye, Ear, and Throat Infirmary, fee £2 2s.; Dr. Logan Turner, Surgeons' Hall. 4. Pathological Bacteriology: Dr. T. Shennan, Surgeons' Hall, fee £3 3s.; Dr. Taylor Grant, Lindsay Place; Dr. Stuart McDonald, New School, Bristo Street; Dr. Russell, Minto House. 5. Dermatology; Drs. Allan Jamieson and Norman Walker, fee £3 3s.; Dr. Stewart Stirling, Skin Dispensary, Lauriston Place, fee £2 2s. 6. Diseases of Children: Sick Children's Hospital. 7. Chest diseases: Dr. R. W. Philip, 26, Lauriston Place, fee £2 2s.; Dr. G. Lovell Gulland, 26, Lauriston Place. 8. Gynæcology; Dr. Brewis, fee £2 2s.; Dr. J. Harg Ferguson, Leith Hospital. 9. The Demonstrations on Modern Gastric Methods, by Dr. A. Lockhart Gillespie, fee £2 2s., available at any time during the year on the request of a sufficient number of post-graduates. 10. Advanced Gynæcology and Microscopical Pathology: Dr. Berry Hart, Surgeons' Hall. 11. Medical Electricity: Dr. Dawson Turner, Surgeons' Hall. 12. Neurology: Dr. J. J. Graham Brown, New School; Dr. Alexander Bruce, Surgeons' Hall.

In Glasgow, special courses in ear diseases are held in November and May at Anderson's College, and Post-graduate courses in pathology and bacteriology at the University in autumn.

End of the Educational Number.

THE OPENING OF THE MEDICAL SCHOOLS.

Charing Cross Hospital Medical School—Wednesday, Oct. 1st. Introductory Address by Prof. W. H. Welch, M.D.
Dental Hospital of London - Wednesday, Oct. 1st.
Guy's Hospital Medical School—Wednesday, Oct. 1st, 3 p.m. Distribution of Prizes by the Lord Mayor of London.
King's College. London, Medical Faculty - Wednesday, Oct. 1st.
London Hospital Medical College—Wednesday, Oct. 1st
Middlesex Hospital Medical College—Wednesday, Oct. 1st. Introductory Address by Mr. Stephen Paget, M.A., F.R.C.S, 3 p.m.
Royal Free Hospital School of Medicine for Women—Wednesday, Oct. 1st. Introductory Address by Charles Burt, Esq., 4 p.m.
St. Bartholomew's Hospital and College—Wednesday, Oct. 1st.
St. George's Hospital Medical School Wednesday. Oct. 1st, at 4 p.m. Introductory Address by Dr. T. T. Whipham.
St. Mary's Hospital Medical School - Wednesday, Oct. 1st.
St. Thomas's Hospital Medical College - Wednesday, Oct. 1st.
University College Medical School—Wednesday, Oct. 1st.
Westminster Hospital Medical School—Wednesday, Oct. 1st.

Provinces.

University of Birmingham—Wednesday, Oct. 1st.
Bristol, University College—Wednesday, Oct. 1st.
Cardiff, University School of Medicine—Friday, Oct. 10th. Opening Address by Dr. D. Berry Hart.
Durham University School of Medicine—Wednesday, Oct. 1st.
Liverpool University College—Wednesday, Oct. 1st.
Manchester, Owens College—Wednesday, Oct. 1st. Introductory Address by Sir Dyce Duckworth. 4 p.m.
Sheffield, University College—Tuesday, Sept. 30th. Introductory Address by Sir H. G. Howse.
The Yorkshire College—Wednesday, Oct. 1st.

Ireland.

Adelaide Medical and Surgical Hospitals, Dublin.
Catholic University Medical School. Dublin—Nov. 2nd.
City of Dublin Hospital—Wednesday, Oct. 1st.
Dr. Steeven's Hospital—Tuesday, Oct. 7th.
Dublin University—Wednesday, Oct. 1st.
Meath Hospital—Wednesday. Oct. 1st, at 4.30 p.m.
Mercer's Hospital- Wednesday, Oct. 1st.
St. Vincent's Hospital—Wednesday, Oct. 1st. Introductory Lecture by Mr. McArdle.
Queen's College, Cork—Tuesday, Oct. 21st.
Richmond, Whitworth, and Hardwicke Hospitals—Wednesday, Oct. 1st.
Royal College of Surgeons in Ireland Schools of Surgery—Wednesday, Oct. 1st.
Trinity College School of Physic, Dublin, Dissecting Rooms, &c.—First week in October: Lectures begin first week in November.

Scotland.

Aberdeen University—Tuesday, Oct. 14th.
Dundee University College—Wednesday, Oct. 15th.
Edinburgh University—Tuesday, Oct. 14th.
Edinburgh School of Medicine, Rooms, and Laboratories—Wednesday Oct 1st.
Glasgow, Anderson's College Medical School.—Thursday, Oct. 16th.
Glasgow, Queen Margaret College School of Medicine for Women—Oct. 16th.
Glasgow University—Thursday, Oct. 16th.
Glasgow, St. Mungo's College—Thursday, Oct. 16th.
Glasgow Royal Infirmary—Thursday, October 16th.
Royal Colleges, Edinburgh—Tuesday, Oct. 14th.
St. Andrew's University—Wednesday, Oct. 15th.

Notes on Current Topics.

The General Medical Council Election.

The voting papers for the election to fill the place on the Council rendered vacant by the expiration of the term of office of Sir Victor Horsley have been sent out, and must be returned by the 19th instant. Mr. Joseph Smith, of Chiswick, is a candidate in opposition to the retiring member. He comes forward as the nominee of the Incorporated Medical Practitioners' Association, and as a protest against the seats allotted to the direct representatives being filled by consultants instead of by general practitioners. The principle is one which has our hearty sympathy and approval, but under present circumstances it is impossible to ignore the valuable services to the profession rendered by Sir Victor Horsley during his tenure of office, and the still more valuable services which it will be within his power to render should he, as we anticipate, be re-elected. It is to be hoped that practitioners will make a point of recording their votes, so that it may not be asserted that they are indifferent to the future conduct of the Council.

Poison-Selling Abuses in Glasgow.

An unqualified chemist's assistant at Glasgow was proceeded against last week for having infringed the Pharmacy Acts by selling oxalic acid. The defendant's solicitor pleaded a novel and not very successful defence, stating that the acid was "sold every day by chemist's assistants," in fact, he himself had purchased thirteen samples of the poison from unqualified assistants. Naturally this defence failed in its object, but it ought to encourage the Pharmaceutical Society to pursue the campaign with renewed ardour until no such allegation be possible.

Wholesale Ptomaine Poisoning.

From time to time the medical profession is sharply reminded of the fact that its range of knowledge is limited in many directions. A ready means of detecting the presence of poisonous ptomaines in a pie, for instance, remains to be discovered by some benefactor of the human race. For a test of the kind, it need hardly be remarked, is a necessary first step towards the prevention of the particular danger in question. It has long been known that pies were specially prone to become poisonous, especially those savoury articles prepared from rabbit and veal or pork. Science at length discovered that the contamination arose from bacterial invasion, with the subsequent formation of ptomaines, and there the matter rests for the present. One of the most extensive epidemics hitherto recorded has just occurred in Derby, where some 150 persons have been poisoned by eating pork pie. Three deaths have resulted, one of them in London and another in Uttoxeter, whither portions of Derby pie had been carried home and consumed. In one instance poetical justice is said to have overtaken a junior attendant in a public office, who ate a portion of a sample that had been procured for analysis.

That kind of test is obviously somewhat crude for practical laboratory purposes, besides being too slow a process. There can be little doubt that sooner or later bacteriologists will devise some quick and simple method of determining the presence of injurious ptomaines in food. Then, and not till then, will it be possible effectually to supervise the large and important industry which supplies the public with meat pies.

A Pharmaceutical Innovation.

The inconvenience which purchasers of both sexes must experience in having to formulate their requirements "cheek by jowl" at the same counter in the retail chemist's shop is obvious. There are numerous articles and cosmetic appliances, peculiar to one and the other sex, which are, so to speak, confidential requirements; yet, under the existing conditions of retail pharmacy, no degree of privacy is obtainable. *Nous avons changé tout cela.* A chemist who recently set up in business at Opelousas, a thriving city or village "out West," has introduced a change with some claim to originality. It is practically a double-shop, with two entrances, labelled respectively "Ladies" and "Gentlemen." The interior is similarly partitioned off, and the ladies' department is in charge of a female pharmacist. This innovation has much to recommend it, and it is certainly not asking too much of our pharmacists to suggest the propriety of allocating a certain counter space to their lady customers, with, whenever practicable, a lady dispenser to minister to their wants.

International Congress on Tuberculosis.

The next International Conference on Tuberculosis will be opened at Berlin on October 22nd, terminating on the 26th. The principal topics which will engage the attention of members are (1) the position of the State in regard to the prevention of consumption, (2) the notification of consumption, (3) the education of school children in the elementary principles of the causation and prevention of the disease, (4) precautions to be taken to prevent the spread of the disease by milk, (5) the consideration of tuberculosis in infancy, (6) the protection of workpeople in respect of the prevention of consumption, (7) the classification of consumptives and the various methods of providing accommodation for them. Communications concerning papers intended to be read at the Congress should be addressed forthwith to the offices of the International Committee, 2, Wilhelm Platz, Berlin.

A decree has been promulgated in Hungary forbidding the practice of massage except by duly qualified medical practitioners.

Mr. John Croft, F.R.C.S., has resigned his appointment as one of the two medical officers of the National Provident Institution, a position which he has held for the last eighteen years.

Dr. T. S. Kerr, Principal Civil Medical Officer of the Straits Settlements, is reported to be returning to England on sick leave in order to undergo an operation.

The authorities of the Isle of Wight County Asylum have elected Miss Wilkinson, M.B., of Edinburgh, to the vacant office of assistant medical superintendent.

France.

[FROM OUR OWN CORRESPONDENT.]

Paris, September 14th, 1902.

Is Cancer on the Increase?

Prof. de Bovis, of Rheims, has published an exhaustive study on the alleged progressive frequency of cancer, of which the following is a *résumé*:—

For a long time medical men and statisticians are not weary in repeating that cancer increases in frequency every year. An American surgeon has even said that, "if the same rate of mortality is maintained for ten years hence, there will be in the state of New York more deaths from cancer than from phthisis, small-pox, and typhoid fever taken together." It must be admitted that the statistics justify amply these pessimistic predictions; in the last twenty years the mortality from cancer has doubled or tripled according to the countries, as the following statistics would show. Out of 100,000 inhabitants England furnished in 1880, 51·1, and in 1900, 82·9; France (Paris), 98·2, 121; Holland, 50·1, 95·9; Ireland, 34·3, 58; Norway, 43·0, 85·0; United States, 35·4, 66·4; Scotland, 46·5, 88. If it were necessary to follow up the question to a much earlier date it would be found that in England cancer caused but 17·7 deaths in 1840 per annum and per 100,000 inhabitants; Norway 19 in 1865, against 85 in 1897. All the above statistics show a rapid increase in the frequency of cancer, but a question might be asked: is this increase real or only apparent? The partisans of the latter opinion, King, Newsholme, Andrew, attribute the increase to three factors—imperfection of earlier statistics, increase of human longevity, progress of clinical research. The reproach addressed to statistics was in part justified, yet taken altogether they deserved a certain confidence. The second cause was of little or no value, while the third appeared to be more or less sustained by the fact that between the years 1875-1880 considerable progress was made in the diagnosis of cancer of the stomach, and since then the liver, intestines, spleen, pancreas have had by turns their "golden age," medical or surgical, but it should be remembered that such cases probably always existed, although ignored by the clinician. To solve the problem figures are necessary. King and Newsholme were the first to study this point. In examining the statistics of the city of Frankfort on the Maine, they addressed themselves particularly to *accessible* cancers (uterus, breast, tongue, rectum, skin), that is to say, those which could be diagnosed formerly as well as to-day, to determine if they had increased in the same proportion as *inaccessible* cancer (stomach, liver, &c.). The result of the mortality of their calculation was as follows:—From 1860-1889 accessible cancers in men had passed from 12·6 to 7·4 per 100,000 inhabitants, that of women from 108·1 to 132·9; the increase was consequently slight. On the other hand, the inaccessible cancers in men had progressed for the same period from 111·8 to 188·8, and in women 132·3 to 193, that is to say, the increase was much more considerable than for accessible cancer. From 1890 to 1899 the mortality of genital cancer in women fell from 76 to 74 per 100,000 women over twenty years of age. At Vienna the mortality of genital cancer in the female fell in ten years (1872-1882) from 162 to 133. Here the decrease is very marked. The statistics of other large cities, Chicago, Berlin, Brussels, Hamburg, Paris, established the same fact, that uterine cancer tended to diminish rather than to increase. If consequently it is proved that external or accessible cancer is at least stationary, must it be concluded that visceral or inaccessible cancer had not increased either, and that their apparent increase was solely due to clinical progress? An affirmative answer might be made without hesitation to the question, if at our day it was proved that cancerous receptivity remained the same for all the organs, but of that nothing is known. In any case it is legitimate to suppose that the transformations of social life, alcoholism, nicotism, and many other causes have rendered our visceræ *loci minoris resistentiæ* much more vulnerable than the external organs.

The above statistics and considerations would justify the following conclusions :—

1. External cancer is stationary.
2. Visceral cancer seems to be on the increase.

As regards the relative frequency of cancer in both sexes, it is the general belief that the women are more prone to contract the disease than men, but the latest statistics concerning the kingdom of Prussia (1900) have shown that the two sexes possess an almost equal cancerous receptivity—100 men for 101 women. According to a table drawn up by Wutzdorff, women present a higher mortality from cancer than men between the ages of twenty-five and fifty, from fifty to sixty the mortality is about the same, but after sixty years the men take the lead.

The period between twenty-five and fifty, representing that of genital activity of the woman, it is natural to suppose that genital cancer is responsible for the unequal division of cancer in the course of the lives of both sexes.

In concluding his article, M. de Bovis said that one thing appeared to him certain, and that is, the attentive examination of statistical documents contradicts more than it confirms the frightful increase of cancerous affections alleged by the majority of authors, and in any case, if there be really an increase, it is not sufficient to create alarm in the public mind.

Austria.

[FROM OUR OWN CORRESPONDENT.]

Vienna, September 13th, 1902.

Sea Sickness.

Weitlauer has been making further experiments on board the Austrian steamships in order to relieve the sea sickness which prevails during rough weather. Clinical observation leads him to conclude that the vomiting is due to the concentration of sensation in the stomach at the time when the ship is making the descent or when about to descend, which he compares to the febrile state. Many of the gastric "pelottes" give relief but do not cure the disease. A very good preparation is antipyrine with caffeine and cocaine, also quinine.

He has constructed an instrument to measure the oscillation, and finds that when the vertical elevation does not exceed nine or ten inches five or ten times in the minute the sickness does not occur. The worst effects are produced when the oscillations range between one-half and two metres nine to twelve times per minute.

He concludes by saying that the symptom is produced by the repeated wave pressure of the fluids against the soft and hard parts of the body where the specific gravity differs. He thought this variation of weight acting on both brain and stomach was the primary cause of the sickness.

Scrofula.

Professor Cornet, in Nothnagel's series, distinguishes scrofula from tubercle. The former may be a mild form of the latter, but is distinguished by the transparent thin skin with prominent veins and a skin in which the lymph passes more easily than in tubercle, which is seen to greater advantage in the child than the adult.

Scrofula is divided into the tuberculous form, non-tuberculous, or pyogenic, and the mixed form. In the first the tubercle bacilli are alone found ; in the second, the real exciters are the staphylococcus pyogenes aureus and albus, and the streptococcus pyogenes, while in the third form these two forms are associated. The non-tuberculous form, is the most striking, in having the transparent skin and mucous membrane. This feature he attributes to the size of the tubercle bacillus being smaller and thus it is able to burrow deeper into the finer structures. The non-tuberculous form is more frequently met with in the young female than in the male, and may be of toxic origin.

The influence of heredity in scrofula is just as marked as in tubercle, and may be traced for generations back. The treatment is fresh air, good food, and hygienic attention ; the same, in fact, as for tuberculosis.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

THE GENERAL MEDICAL COUNCIL ELECTION. —TO RETAIN THE INVALUABLE SERVICES OF SIR VICTOR HORSLEY.

To the Editor of The Medical Press and Circular.

Sir,—The bare idea of *any* man opposing so powerful a member of the General Medical Council, and so ardent a reformer as Sir Victor Horsley has proved himself probably seems ridiculous, and at sight the result of the present contest is perfectly obvious, but I wish to remind your readers that the most popular candidates for Parliamentary honours have again and again been defeated by the over-confidence of their admirers and supporters.

Will you allow me to urge upon the electors to promptly fill up their voting papers in favour of Sir Victor Horsley, and thus make sure of the return of the only man who has ever grasped the question of medical reform effectively, and who is the first man of high position we have found to fight for the rights of general practitioners.

It is absolutely necessary to give an effective quietus to the wholly unwarrantable meddling of Mr. George Brown, who is solely responsible for the cost, trouble, and, to a huge majority of the electors, annoyance of a contest.

I am, Sir, yours truly,
Jas. Brassey Brierley.

P.S.—Vote at once for Sir Victor Horsley.—J. B. B.

Literature.

AIDS TO DENTAL ANATOMY AND PHYSIOLOGY. (*a*)

In this second edition Mr. Underwood has made his little book one of the best of its class. It is, as he intends it to be, not merely a cram-book, but an introduction to the study of dental histology, and a real aid in the study of dental anatomy and physiology generally. The student will do well to master Mr. Underwood's pages before turning to larger text-books. So prepared, the student will have no difficulty in completing his knowledge of the subject, and facing his examiners with confidence. Mr. Underwood's long practice as a teacher has enabled him to acquire the art of giving the quality of objectivity to his writing, and his descriptions of the complex physiological processes of dental histogenesis are made easily comprehensible to the student of average intelligence. The book is notably free from a fault of other similar works, which too often lump together the opinions of pseudo-scientific pretenders with the work of recognised authorities. We are, however, not quite certain in what category of writers Heitzmann and Bödecker deserve to be placed ; but we do think Mr. Underwood's book would not lose in value if reference to these investigators were omitted in future editions.

(*a*) "Aids to Dental Anatomy and Physiology." By Arthur S. Underwood, M.R.C.S., L.D.S., Professor of Dental Surgery at King's College, London ; Member of the Board of Examiners in Dental Surgery, Royal College of Surgeons of England. London : Baillière, Tindall and Cox. Second Edition. Price 2s. 6d.

Notices to Correspondents, Short Letters, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

NOTICE TO HOSPITAL AND COLLEGE DEANS.

The Editor desires to thank those gentlemen attached to the various Medical Schools and Hospitals for supplying him with the information from which the foregoing pages have been composed.

NOTICE TO OUR READERS.

As this number is mainly devoted to information necessary for students intending to join one or other of the various Medical Colleges, and for those who, having passed their curriculum, are about to enter the ranks of the profession, much of the ordinary matter which usually fills our columns is necessarily deferred till next week.

GRATUITOUS COPIES.

A very large number of copies of this issue are being sent gratuitously to all the educational establishments, hospitals, reading-rooms, clubs, and large hotels in the United Kingdom, and to a large number in America, India, the Colonies, and on the Continent; should any of our readers desire to present a copy to a patient or friend who contemplates sending his son to a medical school, our Publisher will be happy to supply him with a duplicate free of cost on receipt of address.

A. R. F.—The proportion is by no means as high as you suppose. According to the recent census the proportion of blind persons in Scotland is ·72 of the population (1 in 1,375). The deaf and dumb were in the proportion of 1 to 1,695.

DIAGNOSIS BY EXCLUSION.

"There is nothing the matter with you," persisted the Eddyite, "absolutely nothing. Can I not convince you?" "Let me ask you a question," replied the sick man. "A thousand, if you like." "Well, suppose a man has nothing the matter with him, and he dies of it, what didn't he have the matter with him?"—*Philadelphia Press.*

T. Hamilton.—You had better divide the tendo Achillis subcutaneously and put the foot up in plaster of Paris. You may then, after the tendon has been lengthened and the heel brought down, divide some of the other tendons. If you do not feel justified in attempting that, send the case to an orthopædic surgeon. Nowadays that branch has attained a great pitch of perfection.

Historicus.—The crimes of Burke and Hare were committed in Edinburgh in 1827 and subsequent years. A number of persons were inveigled to Hare's lodgings, where they were murdered and their bodies sold to the college authorities for dissecting purposes. At length suspicion was aroused and the criminals detected. Hare turned King's evidence, and Burke, who also made a full confession, was hanged. Professor Knox, the anatomist who purchased some of the bodies, incurred great public odium. He lost his practice and his pupils and finally left Edinburgh. Shortly after the conviction of Burke and Hare the Anatomy Acts were passed.

Dr. Clarence.—The cause of death being obviously obscure, it would have been more satisfactory if the inquiry had been adjourned for the purpose of having an analysis made of the contents of the stomach.

Experte Credo.—We know of nothing likely to suit our correspondent's requirements.

STRANGE EPITAPH IN MORETON MARSH CHURCH-YARD.

Here lie the bones of Richard Lawton,
Whose death, alas! was strangely brought on;
Trying one day his corns to mow off,
The razor slipped and cut his toe off.
His toe, or rather what it grew to,
An inflammation quickly flew to,
Which took, alas! to mortifying,
And was the cause of Richard's dying.

G. C. L. S.—We are unable to discover the exact bearing of your question. You had better state your requirements in plain terms. and if, at the same time, you will give a postal address you shall receive a private communication.

M. B.—The schedule has not yet been completed, and we cannot at present assign a probable date for its publication.

A DISCLAIMER.

To the Editor of The Medical Press and Circular.

Sir,—The *British Medical Journal* published last week a shor note by me on the use of paraffin for restoring the bridge of the nose. Some of the daily papers have made "copy" of it, and have named me as though I had invented the method. I wish to say that I had nothing whatever to do with the matter, and I wish it could have been prevented.

I am, Sir, yours truly,
Stephen Paget.

September 15th, 1902.

Ergo.—The idea strikes one as preposterous. You had better direct your attention to the elements of the science before launching forth into such hazardous speculations.

Appointments.

Dwyer, Hubert de Burgh, M.R.C.S.Eng., L.R.C.P.Lond., Medical Officer to the Banbury Union Workhouse Infirmary.

Eaton Oliver, L.R.C.P., M R.C.S., D.P.H.Cantab., Public Vaccinator for Exmouth (Devon).

Garland, Edward Charles, M.R.C.S., L.R.C.P.Edin., L.S.A., Medical Officer of Health for Yeovil.

Gibbs, Norman Edward, L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., House Surgeon to the West Kent General Hospital.

Kirby, Samuel J. J., M.D.Brussels, Medical Officer of Health of the Hoxne Rural District.

Macfie, Ronald Campbell, M.B., C.M.Aberd., Medical Superintendent of Dundee Sanatorium.

Morrissey, Martin R., L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., Certifying Surgeon under the Factory Act for the Ballymore Eustace District of the county of Kildare.

Murphy, W. E. Cavanagh, M.B., B.Ch.Dubl., Medical Officer of Health for the Llantarnano (Mon.) Urban District Council.

O'Hagan, Patrick F., L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., Certifying Surgeon under the Factory Act for the Croydon District of Surrey.

Peacock, Pryce, M.B.Brussels, Certifying Surgeon under the Factory Act for the Castleknock District of the county of Dublin.

Sequeira, James H., M.D.Lond., M.R.C.P.Lond., F.R.C.S.Eng., Assistant Physician to the Skin Department of the London Hospital.

Sharp, Edgar Wm., M.B., Ch.B.Glasg., Resident Medical Officer to the Halifax Workhouse Infirmary.

Vacancies.

Camberwell House Asylum.—Second Assistant Medical Officer. Salary £150 per annum, with board, rooms, and laundry. Applications to the Medical Superintendent, 33, Peckham Road, S.E.

Cornwall County Asylum, Bodmin.—Junior Assistant Medical Officer. Salary £130, with board, furnished apartments, laundry, &c. Applications to the Medical Superintendent.

County Asylum, Rainhill, near Liverpool.—Assistant Medical Officer. Salary £150 per annum, with furnished apartments, board, attendance, and washing. Applications to the Medical Superintendent

Glenties Union.—Medical Officer. Salary £100 per annum. Applications to Michael M'Nelis, Clerk of Union. (See advt.)

Kinsale Union.—Trained Nurse. Salary £45 per annum and rations. Applications to John Murphy, Clerk of Union. (See advt.)

Roxburgh District Asylum, Melrose, N.B.—Assistant Medical Officer. Salary £140 per annum, with board, rooms, and washing. Applications to the Medical Superintendent.

St. Thomas's Hospital and Medical School.—Assistant Pathologist and Demonstrator of Pathology. Salary £250 per annum. Applications to the Treasurer's Clerk.

Withington Urban District Council.—Hospital for Infectious Diseases.—Resident Medical Officer for the Baguley Sanatorium. Salary £120 per annum, with board, apartments, washing, and attendance. Applications to Albert Roberts, Clerk, Town Hall, West Didsbury.

Wonford House Hospital for the Insane, Exeter.—Assistant Medical Officer. Salary £150 per annum, with full board, &c. Applications immediately to the Medical Superintendent.

York Dispensary.—Resident Medical Officer. Salary £110 a year, with board, lodging, and attendance. Applications to W. Draper, Esq., De Grey House, York.

Births.

Collins.—On Sept. 11, at the Red House, Sawbridgeworth, Herts, the wife of Ethelbert Collins, M.R.C.S., L.R.C.P., of a son.

Smith.—On Sept. 6th, at Earl's Court Road, South Kensington, the wife of P. Montague Smith, M.R.C.S.Eng., L.R.C.P.Lond., of a son.

Marriages.

Barry—De Courcy-Ireland.—On Sept. 9th, at Christ Church, Ealing, W., by the Right Rev. Alfred Barry, D.D., Assistant Bishop of London, Captain Cecil Stuart Barry, I.M.S., to Dorothea Alice Maud, second daughter of the late W. de Courcy-Ireland.

Foster—Viret.—On Sept. 10th, at All Saints' Church, Finchley Road, N.W., Albert Ernest Foster, M.R.C.S., L.S.A., of Bradford., to Gertrude Caroline, only daughter of the late Benjamin Pope Viret, of the War Office, London.

Relph—Inman.—On Sept. 10th, at St. Mary's Church, Kilburn, Herbert John Relph, L.D.S., M.R.C.S., L.R.C.P.Lond., of 24, Wimpole Street, London, second son of John B. Relph, of "Ethandene," Hampstead, to Norah, third daughter of the late R. J. Inman, and of Mrs. Inman, "Wulfrana," Greencroft Gardens, West Hampstead.

Deaths.

King-Sampson.—On Sept. 10th, at his residence, Abbotsfield, Lordswood, near Southampton, James King-Sampson, F.R.C.S., aged 86.

Pomery.—On Sept. 2nd, at Bitterne, Southampton, James Robert Moriarty Pomery, M.R.C.S., aged 76.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, SEPTEMBER 24, 1902. No. 13.

Paris Clinical Lectures.

TRAUMATIC SCARLATINA.

By DR. R. DE BOVIS,

Professor at the School of Medicine of Rheims.

TRAUMATIC scarlatina is an eruptive, contagious and often epidemic affection which, in the opinion of the majority of those who have studied it, is of the same nature as medical or ordinary scarlatina. Without touching on certain clinical peculiarities, one of its characteristics is that it develops after a traumatism, and, owing to its being frequently of surgical origin, is still known by the name of surgical scalratina.

The English authors were the first, forty years ago, to point out the existence of scarlatiniform eruptions in subjects who had been operated upon or wounded.

The history of surgical scarlatina commences with the works of Sir James Paget and G. May in 1864. Thirteen years later Sir James Paget republished his former notes in his "Clinical Lectures and Essays" of 1877, and in this latter work he stated that he had met with ten cases of surgical scarlatina. Howard Marsh and Thomas Smith mentioned, one eight and the other seven, new cases collected from a total of forty-eight cases of lithotomy in children.

Then, in 1868 and 1870, appeared the works of Verneuil and of his pupil Tremblay, which must have had considerable influence over the evolution of ideas in respect of surgical scarlatina.

Be this as it may, until 1877 the prevailing opinion was that of Sir J. Paget, who recognised the scarlatiniform nature of the majority of these exanthemata. This opinion was shared, and even emphasised, by Trélat and by Batut, who affirmed that surgical scarlatina and ordinary scarlatina were absolutely identical; the English authors, on the contrary, noted certain clinical or epidemiological differences between them.

The articles of Verneuil and of Tremblay, and the accidents attending the use of carbolic acid, ought to have suggested certain reservations. These were noted in a work by Terrillon, concerning a case of scarlatiniform eruption which the author attributed to septicæmia.

During this time, the study of surgical scarlatina was being pursued in England. In the "Guy's Hospital Reports" of 1879, Goodhart and Howse discussed the question in the light of further observations. Goodhart recorded twenty-five cases and Howse three. The notes are, unfortunately, very brief. The same must be said of those brought before the International Medical Congress at London, where the majority of the preceding English authors, as well as Trélat and Riedinger, joined in the discussion. The latter declared that he had observed fifteen cases of surgical scarlatina, including nine already published, but in a very summary form.

Everyone seemed unanimous in admitting the existenceand the frequency of surgical scarlatina, and in regarding it as a new complication of wounds. Yet, in the very year that Riedinger published his first work, Treub challenged the opinions expressed by this author, and even went so far as to affirm that wounds created a certain immunity in respect of scarlatina.

With the works of Hoffa, published in 1887, we enter a period of criticism and revision of prevailing ideas. The principle of a chirurgical scarlatina was always respected, but each author severely criticises all the works that had preceded his own. Hoffa was of opinion that there were four kinds of eruptions: eruptions of vasomotor origin, toxic eruptions, infectious eruptions, and scarlatina itself. To the first group belong the erythemata; to the second, eruptions following on transfusion, the use of sublimate, of belladonna, &c.; to the third, the eruptions of septicæmia, diphtheria, typhoid fever, &c. The number of cases of genuine surgical scarlatina was thus very much reduced, and the author only admitted six or seven as authentic.

Additional observations have since been published in an important work issued ten years ago by Emil Koch, who made a conscientious study of the scarlatiniform eruptions occurring in wounded or tracheotomised children. In 1895, Conrad Brunner brought together nineteen observations, and traced the clinical picture of this "Eogenannten Wundscharlachs." During this time, Volkovitch, Sarytchev, and Nossovitch published or criticised similar cases in Russia.

We are thus confronted by a very much debated question. To prepare the way, we will first of all sketch the picture of surgical scarlatina, as described in the recorded cases, and we will then discuss the pathogenic or diagnostic problems which are connected with it.

In order to elucidate the etiology of chirurgical scarlatina I have collected nearly 150 observations published under this head (excluding certain series of cases published without the least detail). Of these, for various reasons, of which the principal is the insufficiency of clinical details, we can only make use of about a hundred for our purpose.

The preceding figures seem, in any case, to indicate a certain frequency. It is worth noting that the majority of observations belong to the commencement of the antiseptic period, or even to the end of the pre-antiseptic period; at the present day, traumatic scarlatina seems to be of rarer occurrence. It has often taken on an epidemic aspect, notably in children's hospitals, in which certain authors have collected a very considerable number. Goodhart mentions twenty-five cases and Koch thirty-one.

As a matter of fact, it is in the young that traumatic scarlatina is most frequently met with; out of 147 observations, there were 117 concerning subjects under fifteen years of age—a percentage of nearly 80 per cent. Two-thirds were in males, who are always most susceptible in regard to traumatisms.

No particular traumatism can be accused of specially favouring the evolution of surgical scarlatina; some are antiseptic, or supposed to be, as, for example, operations performed on non-infected patients; others are wounds, or superficial cutaneous lesions, of no apparent gravity; in other cases patients already infected were attacked (incision of an ordinary or tuberculous abscess, scraping of glands, tapping, osteotomy and resection of suppurating osseous lesions, simple or tuberculous); others have a kind of mixed character from an antiseptic point of view; the operation for hare-lip, extirpation of lingual papilloma, &c.; lastly, others are antiseptic by definition, such as inoculation with vaccine.

The preceding classification only refers, so to speak, to common infections; but some of a less common type are occasionally met with. Thus a patient of Schäffer's had tetanus; another, recorded by Espine and Marignac, suffered from a slight form of hospital gangrene; a third, whose case was related by Patin, had erysipelas; while E. Koch brought forward a whole series of cases of scarlatina in young tracheotomised diphtheritic subjects.

Contagion by an anterior scarlatina, either medical or surgical, was noted in eighty-five cases out of 150—*i.e.* in 56 per cent. In a number of cases the contagion was not open to doubt. Haffter, for example, relates a case of scarlatina which occurred in a schoolboy who had been scratched by one of his schoolfellows who was actually desquamating. Leube contracted scarlatina by pricking his finger during the post-mortem examination of a scarlatinal subject. A student, operated on for phimosis by Browne, had previously visited a fellow-student suffering from scarlatina. Nossovitch published two cases in which the contagion was less certain, but where the origin of the scarlatina was curious enough to deserve mention: a lady, who was a specialist in piercing ears for earrings, had pierced the ears of two little girls; a few days later these children presented the typical symptoms of scarlatina just at a time when an eruptive fever was epidemic in the village, which may quite possibly have been scarlatina. We must, moreover, bear in mind that, in certain cases, it is the operator who appears to have conveyed the infection. Lastly, in a very large number of observations, contagion appears admissible *a priori*, since they bear on patients in hospital.

To complete these etiological data, bear in mind that Brunner's patient had already had scarlatina. H. Page's patient had even had it twice.

The evolution of surgical scarlatina, like that of medical scarlatina, may be divided into four periods: incubation, invasion, eruption, desquamation.

With regard to the period of incubation it would seem, from the majority of observations, that the infection may occur either during or after traumatism, anterior infection, though quite possible, being the exception, if we bear in mind the absence of any cases confirming its occurrence. In 104 cases of surgical scarlatina the interval between the traumatism and the eruption was, in fifty-seven cases, less than three days; in twenty cases from three to eight days; in eight cases from eight to fifteen days; in two cases from twenty-one to twenty-eight days; lastly, in thirteen cases it was upwards of four weeks. The fact of the progressive decrease of the intervals seems to show, by itself, that infection takes place at a period contemporary with the traumatism.

Since the incubation period of ordinary scarlatina is at the least from three to four days, it is quite possible that several of the cases just mentioned are merely instances of scarlatina in a wounded patient. We can, it is true, as we shall show later, formulate a hypothesis in favour of their being really examples of surgical scarlatina; but we cannot take them into account in determining the duration of the period of incubation. Veit, Hagenbach-Burckhardt, and Gerhart do, as a matter of fact, mention incubations of twelve, fourteen and sixteen days, but these are very rare cases and there are too many exceptions. If, therefore, we restrict our attention to cases in which the traumatism does not date from more than eight days, we find seventy-seven cases with a maximum incubation period (calculated from the date of traumatism of two and a-half days).

The symptoms of the period of invasion are those of every pyrexial infection—a temperature of 39° to 40° or 41° C., shivering, insomnia, restlessness, delirium; in children, convulsions and ordinary gastro-intestinal reactions (vomiting, intense thirst, furred tongue, constipation, or diarrhœa), and especially sore throat. This is the clinical manifestation which ought to interest us most, for it is one of the fundamental symptoms of scarlatina.

In the period of eruption, the first thing to consider is the exanthem. The date of its appearance is rather variable. It may be noted in the night of the day during which the first symptoms of the disease appeared, but, as a general rule, it only appears the following day, or even the day after that; it appeared in forty cases in twenty-four hours; in ten cases in two days; in seven cases in three days; in one case after four days.

This exanthem is often mentioned without details, or is described as "typical," "scarlatiniform," &c., which, in view of the diagnosis, justifies the supposition that it had the usual characteristics of a scarlatinal eruption in respect of starting point, distribution, progression, &c. But this is not always the case.

In twenty-nine cases the eruption was said to emanate from the wound; the latter being surrounded, at first, by a red zone, which raises a suspicion of impending erysipelas: from this red ring start red bands of variable width, reminding one, at times, of lymphangitis, and these grow larger, coalesce, and end by invading the other parts of the body. If the wound is on the face or arms, the thorax is rapidly invaded; if it is on the legs it is the abdomen and upper part of the thighs which present the most pronounced scarlet tint. In any case, it extends very rapidly, and in twenty-four or forty-eight hours the rash appears to have reached its maximum. Its diffusion and distribution seem to be the same as in scarlatina.

This connection between the wound and the eruption is, however, not the rule, since the majority of observers either remark the absence of redness, exanthem or eruptive manifestation around the wound or simply say nothing about it.

As in scarlatina the exanthem may be complicated by the appearance of a miliary eruption. The blisters observed by Bollice in the neighbourhood of the wound are a more abnormal manifestation, and may be simply the result of local infection. Gimmel and Konetschke mention, moreover, a certain œdema of the skin or of the lower extremities, without accompanying albuminuria.

Itching seems to have been as rare as in ordinary scarlatina, since it has only been met with on three occasions.

In a case of Brown's, the eruption did not appear until after death; the evolution had been exceedingly rapid, the patient having died in fifteen hours. The fever, which may reach and even exceed 40° C., progressively decreases when the eruption begins to fade. It is only maintained for two or three days at its maximum, and at the end of five or six days it has altogether subsided.

The sore throat, or, speaking more generally, the tonsillar symptoms, were only absent in ten cases, and these are presumably the only cases where such was the case, for observers could not possibly term "typical" or "characteristic" any scarlatina in which such an important symptom was absent.

The tonsillar manifestations of typical scarlatina present, as is well known, two variations—angina and exanthem. The first, which is of variable intensity, may be absent, although but rarely so; the second is pretty constant. Unfortunately, too many observations are wanting in the minute details which are necessary to enable me to formulate a classification of this kind in respect of traumatic scarlatina. One thing, however, appears certain, viz., that this symptom is less frequent and less severe than in medical scarlatina, since rarely has anything but slight angina, or even simple redness, been observed. Sub-maxillary adenitis, slight exudations or white spots, and *a fortiori*, diphtheroid and diphtheritic exudations, are but rarely referred to.

With reference to the tongue, various authors, especially the English, mention the presence of a thick fur, and the redness of its edges (strawberry tongue), or content themselves with describing it as "scarlatinal," which no doubt includes the preceding characteristics.

A point which has been rather neglected, but one which might be instructive from a diagnostic point of view, is that of the modifications undergone by the wound during surgical scarlatina. A fairly typical observation has been recorded by

Beaudouin; the patient being a child, æt. 4, who had just been circumcised by a doctor who was at the time attending scarlatinal patients. Thirty-six hours after the operation a scarlatiniform eruption started from the wound, the affection ran its course without sore throat, but the wound of the prepuce and glans became covered with "a thick, greyish, pultaceous deposit, identical in appearance with that of diphtheria." The case was so clear that Beaudouin immediately associated this exudative with that observed on the tonsils in ordinary scarlatina. Let us add that the little patient communicated the scarlatina to his doctor, who had not had it previously. I cannot recall any other observations mentioning with such clearness the peculiarity in question, but there are a few cases which deserve notice. Browne had occasion to circumcise a student, who visited, daily, one of his fellow-students suffering from scarlatina; thirty hours after the operation marked scarlatinal symptoms supervened; ten hours later the wound took on a gangrenous aspect, followed by coma and death in seventy hours. Sore throat was absent in this patient, who was, nevertheless, the starting point of a series of surgical scarlatinas.

In the same category may be classed an observation by Howse, who speaks of the "dirty" aspect of the wound and its tendency "to exfoliate in flocculent masses." Other authors refer merely to the earthy appearance of the wound, the swollen and patulous borders with secondary suppuration, the subsequent formation of a slough, slow convalescence, &c.

The various characteristics just mentioned have probably no specific value; since the works of Verneuil and Dunoyer, it has been well known that pyrexia has, generally, a harmful or retarding influence on the healing of wounds. Thus Parker only confirms a general pathological law when he says that during surgical scarlatina "wounds reopen, even when partially healed." This law, however, has exceptions, for, in four cases, the cicatrisation of the wound proceeded without hindrance or delay; but we must bear in mind that in two of them the lesions were very trivial.

The period of desquamation is somewhat variable, commencing generally about the sixth or seventh day following the appearance of the exanthem, rarely later; in a case of Hall's on the ninth day; on the nineteenth day, in a patient of Howse's. First of all, there is a scaliness or dustiness, notably on the face, then the scales grow larger, and we soon notice the appearance on the limbs, around the wound (Leube, Strubell), or in its neighbourhood, of the large characteristic scarlatinal scales. When the desquamation is more abundant around the wound it is because the exanthem originated in that spot. In four cases it remained simply branny. Its absence is only once mentioned: the affection had, nevertheless, been of a rather serious nature, and had been transmitted by contagion to another person. The duration of this period of desquamation, which authors do not as a rule definitely state, was in two cases eight days, in three cases fifteen days, in one case three weeks, in one case forty days.

Among the complications, diphtheria and albuminuria are those which interest us most in respect of the relationship between surgical and ordinary scarlatina. Diphtheria, as we have already shown in connection with sore throat, was only met with in two cases, one of which proved fatal. Albuminuria occurs oftener, and is mentioned in sixteen cases. In two of Koch's patients there appeared, during defervescence or convalescence, a recurrent erysipelas, which started from the wound.

The prognosis, except in subjects tracheotomised for diphtheria and those suffering from a grave surgical affection, is not of great severity, since out of a total of 125 cases, only nine deaths are mentioned. The causes of death are diphtheria, renal or pulmonary complications, and subacute or acute sepsis.

Lastly, we must mention two cases of recurrence of the exanthem, one of which belongs to Konetschke and the other to Schäffer. In the first it was the case of a child with a complicated fracture of the arm, in whom, fourteen days after the accident and a first eruption, followed by desquamation, there appeared a second, paler, eruption, accompanied by fever and fresh desquamation; the same thing recurred eight days later. There were thus three attacks in three weeks, which is certainly extraordinary. Schäffer's patient was attacked by tetanus, which appeared a week after a wound in the finger; nineteen days after the appearance of the tetanus there appeared a scarlatiniform eruption; sixteen days later, when the desquamation had almost ceased, a fresh eruption appeared, having the characteristics and an evolution similar to the first. We have, moreover, mentioned, in connection with etiology, two patients (H. Page, C. Brunner) who were undergoing, one his third, the other his second, attack of scarlatina, but the attacks had not followed each other immediately as in the preceding cases.

It is interesting to note that some of these patients were, to all appearances, the causes of fresh cases of scarlatina by contagion. We have notes of thirteen cases of the kind. Independently of these cases, there are several others in which contagion seems very probable; for example, the series of Murray, Goodhart, Koch, Treub, a total of fifty-one cases which were discovered, generally in epidemic form, in the surgical wards of children's hospitals.

(To be continued.)

Original Communications.

SOME POINTS IN

THE MODERN DIAGNOSIS AND TREATMENT OF ANÆMIAS.

By DAVID WALSH, M.D., C.M.Edin.,

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As a symptom, anæmia demands the careful attention of all who are called upon to undertake the treatment of disease, whether from a general or a special point of view. In our present state of knowledge we are often obliged to confess ourselves baffled in the search for the primary cause of this trouble. In a certain sense all anæmias are secondary to some cause that may either lie on the surface or, on the other hand, be altogether obscure. For purposes of classification, however, it is convenient to divide anæmias into two groups—(*a*) primary, and (*b*) secondary. Of these the primary include the varieties described as idiopathic, pernicious, essential, progressive, and malignant, all of them denoting types that resist treatment, and steadily progress towards a fatal termination. The secondary, or symptomatic, anæmias, on the other hand, run a milder course, and usually follow some ascertainable lesion or injury, or attend some concomitant disease.

Treatment is mainly concerned with the secondary group. Hitherto the great strides that have been made in the knowledge of the facts of the primary anæmias, as often happens in dealing with complex pathological problems, have not been followed by corresponding advances in practical treatment. The therapeutic resources of the physician remain much the same as they were before the development of that most brilliant branch of modern research, the study of the blood changes in disease. There can be little doubt that one day the growing mass of detailed observations will be reduced to general deductions, and the physician will be then enabled either to prevent or to alleviate those abnormal blood conditions that he is now only in too many cases powerless to relieve. In the meantime the most skilful physicians have not been able to devise curative methods to meet the conditions revealed by the blood examinations of the graver anæmias. Nevertheless, the general practitioner will find himself often dependent upon detailed examinations of the blood, both in arriving at diagnosis and in gauging the result of treatment. At the same time, he will not be able to throw aside his former method of clinical observation and of treatment that is more or less empirical. The present state of affairs has been well expressed by Whitla (a) who writes: "Great advance has recently been made in the classification of the different forms of anæmia by the brilliant researches of Ehrlich, Lorrain Smith, and many others. Though these have not yet very rationally helped the therapeutist, it seems certain that we are within a measurable distance of hoping for new aids to the treatment of such diseases as pernicious anæmia and the various forms of leukæmia."

Modern treatment has laid much stress on the value of sunlight, fresh air and exercise in the treatment of the secondary anæmias. Good food is no less essential, especially in the large and sometimes only partially recognised class of starvation anæmias. As regards the latter point, it is interesting to speculate how much of the benefit may be due to the iron which enters the system in organic combination, as in milk, the yolk of eggs, and in certain vegetable and animal albuminoid forms. Exercise doubtless helps matters by stimulating the activity of the excretory organs, notably the skin, whereby the toxic substances that are associated with many anæmias are removed from the circulation. Attention to the state of the alimentary canal also becomes a point of prime importance to the practitioner. The care of the teeth is also essential, and the removal of all dental tissue showing cario-necrotic changes constitutes an early step in routine treatment. Another important point is a clean tongue, which may be regarded as an essential to the success of general measures. Catarrh of the stomach requires careful treatment with such remedies as bismuth and hydrochloric acid, while dyspepsia should be remedied with pepsin and other drugs, combined with a careful attention to diet. Purgatives take an important place, possibly or probably by removing toxic matter from the intestines, as well as by stimulating the excretory functions of the bowel. Speaking on this point Mitchell Bruce (b) writes: "It is of the first importance that the practitioner should appreciate the clinical relations of constipation, not only that he may attach due importance to the treatment of the disorder, but also lest he should be tempted to treat what are but its symptoms, particularly anæmia, as substantive or primary affections instead of through the bowel. In other words, these phenomena have to be referred to the pathological condition of which they are significant, and it, not they, must then be attacked."

The general principles of the treatment of the curable anæmias may be expressed as follows:—

1. To restore tone to the system.
2. To remove toxic substances from the body.
3. To make good deficiencies in the blood.

1. *To Restore Tone to the System.*—This is to be hoped for mainly by placing the patient as far as possible under the conditions essential to a wholesome environment. The latter includes open-air exercise, liberal diet, and so on. Of late much attention has been paid to the influence of climate upon anæmia. Dr. Oliver has referred the apparent increase of red corpuscles in persons removed to high attitudes to a concentration of plasma, but he has further shown that a similar phenomenon may be obtained at sea level in dry climates, such as Egypt. Under these circumstances it would be preferable to send weak anæmic patients to a warm seaside place.

2. *To Remove Toxic Substances from the Body.*—As already stated, attention to the teeth, with regulation of the stomach and bowels, tends to remove or lessen the production of toxic substances from situations whence they can be readily absorbed into the blood. The stimulation of the excretory functions of the intestine is also at the same time effected. Excretion of toxic substances may also be aimed at by stimulating the action of the lungs, the skin, and the kidneys. In this way exercise and warm baths may be made to play a most important part in the cure of anæmia. The present writer has found the Tallerman superheated air treatment of great value in secondary anæmias, more especially in those associated with a gouty or rheumatic taint. He has seen cases of chlorotic young women improve rapidly under the influence of this method alone. The result may not unreasonably be attributed to the elimination of toxic substances in the profuse sweating that follows exposure of a part of the body to the high temperature of 250° or 300°F. This experience accords with that of Senator, of New York, (a) who has seen good results from sweating where other means failed. The pallid dry skin of anæmia is part of the general defect in functions of all the glands of the body, which is regarded by Professor Clifford Allbutt (b) as characteristic of this class of patients.

3. *To Make Good Deficiencies of the Blood*, which is obviously in some cases to be done most directly by diet.—Unfortunately there are often obstacles in the way of digestion and assimilation. As everyone knows, iron, especially in combination with aperients, sometimes gives brilliant results in chlorosis. In other forms of anæmia, however, it is often useless when given in the ordinary form, such as the tincture ferri perchloridi or Blaud's pill. This fact has naturally led to the trial of other combinations, such as those of iron with organic acids, as lactic, citric, acetic and malic acids. These salts, although more readily digestible and non-constipating, nevertheless often failed no less than the inorganic salts in furnishing the blood with the iron that forms one of its essential constituents. The next step was to cast about for some form of iron in direct combination with the molecule of some organic substance. That material enters into ordinary diet, as already mentioned, in such substances as yolk of egg and milk, and it has been proved experimentally that an animal cannot live upon a diet free from organically-combined iron. Analysis shows that the chief constituent of red blood corpuscles, hæmoglobin, contains 0·34 per cent. of iron in combination, an amount that, however small, is larger than in any other substance. Hæmoglobin is, therefore, promising from a theoretical point of view, and has proved clinically satisfactory in the form of "Hæmatogen," which is a preparation composed mainly of hæmoglobin. How the remedy acts is not exactly clear. It may be as suggested in the *Lancet*, of November 6th, 1898, that the good effects may be ascribed to a species of organotherapy, while at the same time it acts as a nutrient. The latter fact is in accordance with the composition of hæmatogen, the bulk of which consists of albuminous matter. This particular preparation, therefore, may produce its good effect by furnishing iron in an easily assimilable form, and as an aid to nutrition. In any case it is free from the drawbacks of the ordinary iron salts, which are apt to cause gastric irritation, headache, and constipation.

Applying the test of clinical results, the present writer has found hæmatogen of value in various anæmic conditions. It proved especially useful in several anæmic children who were being treated for eczema and ringworm. In one case, a girl, æt. 21, under treatment for lupus of the cheek of fourteen years' duration, the general health improved, and colour returned under the administration of hæmatogen, whereas little benefit had been obtained from prolonged courses of the ordinary iron compounds.

The difficulty of administering iron to children is well recognised. They cannot swallow pills, and they naturally decline such astringent and unpleasant drugs as sulphate of iron and the muriated tincture of iron. Clearly it is often imperative that children should have iron in some form or other. Of modern preparations of that drug hæmatogen certainly seems well calculated to meet the requirements of the case. Besides, it has the great advantage of not causing constipation, which is no less a bugbear of the nursery than of adult life.

The quality of non-astringency makes hæmatogen of value in cases where it is not advisable to use the astringent forms of iron. The constipation which almost invariably attends the use of the sulphate and the muriated tincture of iron is in some cases most undesirable, if not actually dangerous, and has to be counteracted by combination of the iron with purgatives, such as the sulphate of magnesia or aloes. The constant use of aperients, it need hardly be remarked, creates peculiar dangers, among which may be mentioned congestion of the pelvic organs and hæmorrhoids, the latter especially when aloes is the active agent. As the greater amount of the ordinary salts of iron given by the mouth unquestionably goes through the body unaltered, it seems rational to give a mild organic and absorbable iron compound like hæmatogen, with the use of an occasional aperient where necessary, and at the same time to pay careful attention to the whole of the digestive organs.

(a) "Whitla's Dictionary of Treatment." Lond., 4th Edition, 1902, p. 40.

(b) "Principles of Treatment." Mitchell Bruce. London and Edinburgh, 1899, p. 518.

(a) The Medical Press and Circular, June 20th, 1900.

(b) *Ibid.*, February 10th, 1901.

In very acute and severe cases transfusion of healthy human blood or of sterilised normal saline solution may be required.

Among general drugs in the treatment of anæmia nux vomica is entitled to a high place for various reasons, which may be summed up in the statement that it acts at once as a gastric, vascular, and nervous tonic (Brunton). It is of special value in bracing up the atonic muscular walls of the stomach and intestines. The constipation that is so common a feature in anæmic conditions may be treated with this drug, of which Dr. Phillips writes: "Five to ten drops of the tincture of nux vomica, taken in a tumbler of cold water before breakfast and dinner, acts as a laxative, and often overcomes chronic constipation." (*a*)

Arsenic in small doses is a useful drug in the treatment of anæmia, although the tendency of late years has been to use this drug more and more cautiously; it is an undoubted fact that many cases of chlorosis may be cured rapidly without the administration of arsenic.

There is no need to do more than mention the various preparations of iron that are in everyday use, such as the sulphate, the tincture of the perchloride, Blaud's pill, reduced iron, the citrate of iron and ammonia, and the vinum ferri.

Mercury is often useful in overcoming the constipation, and may be given in a dose of one-third of a grain of calomel, or one grain of grey powder every three hours for twenty-four hours, or a small dose of grey powder may be given nightly for several weeks.

The foregoing points are of the nature of rough notes of one's clinical experience of some of the curable anæmic conditions. In the hope that they may have some suggestive value to others, they have been brought together in this brief and informal article, which will be concluded by a few notes upon the more prominent anæmias.

Apart from the anæmia due to insufficient or improper food, and to hæmorrhage or other drain upon the blood, stands the large group connected with certain specific infections and toxæmic processes; of the former a good instance is afforded by malaria, due to a hæmatozoon that directly attacks the red blood corpuscles. Syphilis is often associated with a marked anæmia. Certain metallic poisons, notably lead, invariably produce anæmia. Many of the infectious fevers cause destruction of blood corpuscles, as in enteric fever and diphtheria. Another group of toxæmias may originate in the intestinal canal, as in the well-known copræmia theory of the late Sir Andrew Clark, which ascribes chlorosis to "auto-intoxication," or the absorption of toxic material from the fæcally obstructed bowel of chronic constipation.

A note may be appended as to a few of the chief features of chlorosis, pernicious anæmia, splenic anæmia, Hodgkin's disease, and leucocythæmia.

Chlorosis is a common and curable malady occurring almost entirely with young women. There is a peculiar greenish pallor of the skin, and symptoms of anæmia of brain, heart, and other organs, such as fainting, dyspnœa, and amenorrhœa, with hæmic cardiac bruits and œdema of extremities. The most marked change in the blood is a relative fall in hæmoglobin. Taking the average of red blood corpuscles as 5,000,000 per cubic mm., with a hæmoglobin standard of 100 per cent., in chlorosis the red corpuscles fall to, say, 3,500,000, while the white corpuscles are unaltered in number. The great change is in the hæmoglobin, which falls to 50 or 60 of the normal. The colour index of the individual corpuscles falls to 0 6 or 0·5 instead of the standard 1. The most generally accepted modern view is that in chlorosis (*a*) "there is a defect in hæmogenosis, whereby the red corpuscles are unable to take up their normal amount of hæmoglobin."

Pernicious Anæmia is a disease chiefly of maturity met with in both sexes. It is progressive in character, and almost invariably fatal. There is feebleness and great pallor of skin, usually of a yellowish or lemon tint, with a marked tendency to hæmorrhages, recurrent febrile attacks, quick pulse, hæmic base murmurs, œdema palpitation, dyspnœa, and other signs and symptoms of anæmia. The changes in the blood are distinctive. The red corpuscles fall from 5,000,000 to about 1,500,000 per cubic mm. The hæmoglobin is about 30 to 50 per cent., but is relatively increased in amount, as shown by the colour index of 1·6, a condition exactly the opposite of that in chlorosis in which the hæmoglobin is relatively decreased, as shown by the colour index 0·7. The white corpuscles fall from 8,500 to 400, and the relation of red to white corpuscles in pernicious anæmia is 1 in 250. The red corpuscles show great variation in size, and giant forms (megalocytes) are constantly present, as well as microcytes, and some nucleated red corpuscles are always present. The red corpuscles show great irregularity of form (poikilocytosis). The spleen is sometimes slightly enlarged, but the enlargement does not form a feature of the malady, as in the following conditions.

Splenic Anæmia in the adult is a profound and progressive anæmia, associated with an enlarged spleen, but without leucocytosis or enlarged glands. There is a considerable fall in red corpuscles, 3,000,000 to the cubic mm. The hæmoglobin is greatly reduced (from 100 to 30). The white corpuscles sink from 8,500 to 6,000, with a relative proportion to red corpuscles of about 1 in 500. Splenic anæmia is sharply separated from Hodgkin's disease and from leukæmia by the leucocytosis in these two conditions.

Leukæmia, or Leucocythæmia, is characterised by a large increase of white cells and enlargement of the spleen. There are two chief types: 1, the splenomedullary; and, 2, the lymphatic.

1. The spleno-medullary, in which the changes are chiefly in the spleen and in the bone marrow, and the blood shows a great increase in large mononuclear cells (myelocytes), supposed to be derived from the latter, and not present in normal blood. The red corpuscles fall from 5,000 000 to 3,000,000 per cubic mm., but the white corpuscles mount from 8,500 to 500,000, and show a proportion of 1 to 4 red corpuscles, or sometimes even less.

2. In the lymphatic form there is enlargement of lymphatic glands. The red corpuscles fall to 2,500,000, but the leucocytosis is far less marked than in the first variety, namely, 125,000 per cubic mm. The white cells are mainly large and small hyaline mononuclear leucocytes. The proportion of white to red corpuscles is about 1 to 20.

From the foregoing notes it will be seen that both diagnosis and prognosis may often be determined by examination of the blood. The pathological increase of white cells after severe hæmorrhage, and in toxic and inflammatory conditions, can also be distinguished by the nature of the cells.

The Danish Government means to maintain a foremost place in the application of the best findings of medical science. A new Serum Institute was recently opened at Copenhagen, and at the inauguration this country was represented by Dr. Dean, of the Jenner Institute, and Professor Sims Woodhead, of Cambridge.

(*a*) "Materia Medica." C. D. F. Phillips, M.D.Lond. 1886. P. 465.

(*a*) Allchin's "Manual of Medicine." Article by Sydney Coupland, M.D. Vol. II., p. 307.

SOME ASPECTS OF MODERN SEWAGE DISPOSAL.

By ROBERT CALDWELL, F.R.C.S., D.P.H.,
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Science teaches that matter is indestructible, and that the varying manifestations of life are dependent on a constant rearrangement, by natural forces, of atoms whose properties must for ever remain unchanged and unchangeable. The nitrogen which enters into the composition of vegetable albumin, on being taken as food by man or other animal, is passed through the alimentary canal either in its original form or else as part of some other complex chemical substance; or, more probably, it leaves the body by the urinary tract in the form of urea or some compound of a like nature. Whatever form it may take as an excretion, its fate, when returned to the soil, will be, in all cases, the same. The complex organic body of which it forms part is resolved into its primary constituents, and these forming food for plant life, once again become part of that albumin from which the cycle started. Assimilation by the animal body, instead of excretion, would make no change in its destination, animal forms after death being subjected to exactly the same influences as other organic matter, all returning alike to those ultimate forms out of which they first arose. The atoms of carbon, and hydrogen, and O entering into the formation of fats and carbo hydrates, traverse the same circle as those of nitrogen, the transformation which they undergo being, broadly speaking, of a similar nature.

The whole matter may be briefly restated as follows: Simple inorganic forms being absorbed as food by plants are changed into such organic compounds as starch, fat, albumin and sugar, and these, serving first as food for the animal world, are, after varying physiological changes, upon which the process of animal nutrition depends, returned to the soil as urea, uric acid, leucin, tyrosin, &c., and ultimately resolved into their inorganic constituents. It is in this last form that they constitute the food necessary for the maintenance of vegetable life. The products of respiration mainly exist as inorganic forms, and therefore available for plant life without the intervention of soil influence.

It is perfectly clear that if one link in this chain is broken the whole circle must fall to pieces and life such as we know it must cease to exist. This fact is well known, but its practical application does not at all times meet with that recognition which its vast importance deserves. The biological treatment of sewage so largely in vogue at the present day may fairly be taken as an illustration of the truth of the above statement. In this system of sewage disposal the organic matter to be treated is led on to a filter bed of coke, coal, clinker, or like material, and then subjected to the same bacterial agencies as those normally resident in the soil, and which result in the transformation of organic into inorganic matter. The process is, therefore, an imitation of what daily takes place in nature, with the important exception of the fact that in the latter case the inorganic forms which constitute the final result of bacterial activity are utilised for the maintenance of the surrounding vegetation, and indirectly of those animal forms which depend upon it for the continuance of their existence. In the case of the artificial process, what is known as the final effluent is discharged into the nearest convenient watercourse, its main effect, if in the neighbourhood of the sea, being to spread disease by the medium of oysters and other forms of shellfish.

It should be fully borne in mind that the changes which result in the transformation in the soil of organic into inorganic matter, being putrefactive in their nature, are brought about by the influence of micro-organisms; the older systems of sewage disposal, in which the crude material was applied directly to the soil, failed, most probably, in virtue of the fact that the available land was insufficient in extent for the purpose to which it was applied, the soil organisms being unable, in consequence to complete the task demanded of them.

Sewage, of course, must be got rid of somehow, but once reduced to simple inorganic forms it ceases to be sewage (properly so-called) but should be considered as a fertilising agent, absolutely essential for the continuance of life, and provided for us by the laws of nature. This reduction is admirably effected by the biological processes in question, after which all nuisance is at an end, and what was lately putrefying matter is now an odourless liquid of high manurial value, which, according to our present ideas, is diverted from its natural destination, *i.e.*, the soil, to an artificial destination, where its effect can only be for evil.

Quoting from Parke's and Kenwood's "Hygiene and Public Health," the following may be considered as a fair sewage effluent after biological treatment:—

		Parts per 100,000.
Saline and free ammonia		1·50
Organic ammonia		·15
Oxygen absorbed in four hours at 80° F.		1·50
Oxidised nitrogen		1·20
Chloric		10·50
Suspended matter		2·15
Solids in solution		86·15
(*a*) Volatile	35·05	
(*b*) Non-Volatile	51·10	

Supposing such a high standard of purity as that indicated above is maintained throughout the United Kingdom these figures will give some approximate idea of the waste which daily goes on in our midst. It is perfectly true that the application of effluents to land after biological treatment, as directed by the Local Government Board, has not proved an unqualified success, but the failure may be attributed to the fact that the land obtainable is of insufficient area, and therefore rapidly becomes waterlogged. And this point opens up the wide question (one upon which the lives and well-being of thousands depends) as to how far the views of private landowners are to stand in the way of progressive legislation.

There is another aspect to this question, also of the gravest importance. Investigations carried out by the most eminent sanitarians of the day point to the fact that the biological treatment of sewage is no guarantee of the destruction of pathogenic organisms. Dr. Houston, in connection with a recent Commission on Sewage, speaks as follows:—"That it is doubtful if any bacterial process in practical operation at the present time 'treats' or 'detains' the sewage for a sufficiently long period to allow of the complete destruction of all the pathogenic germs by bacterial agencies" (*B. M. J.*, Vol. II., August 18th, 1900). Professor Glasiter, in a paper on "Sewage Disposal and Sewage Purification," read before the Philosophical Society of Glasgow on March 20th, 1901, states, as regarding the same question, "We may legitimately infer—although it is but mere inference—that the enteric fever and cholera bacilli will also survive the treatment and pass by the effluents." On the other hand, according to the Report of the Medical Officer of the Local Government Board for 1900 and 1901, the investigations of Dr. Sidney Martin, F.R.S., most forcibly indicate that the enteric bacillus dies out rapidly in unsterilised cultivated soils. The practical inference of Dr. Martin's admirable work is, of course, sufficiently obvious, and it is sincerely to be trusted that beneficial results are not far distant. There are, indeed, at present indications that the public mind is awakening to the dangers and disadvantages of the present system, and in this connection it is satisfactory to learn that Lord Iddesleigh in his address to the recent Congress of the Royal Institute of Public Health at Exeter, stated that the question of the application of sewage to land was receiving the attention of the Royal Commission of which he is President.

Even if the necessary information were available, it would be obviously impossible to discuss within the limits of a short communication a question involving the most complex considerations, not only of a scientific, but also of an economic and political nature. An effort therefore has only been made here to arouse interest by treating the question in a general sense, and the time for this attempt should not be unpropitious in view of the Royal Commission on Sewage Disposal, which is now sitting.

THE MENTAL FACTOR IN MEDICINE. *(a)*

By ALFRED T. SCHOFIELD, M.D.

Last year I read a somewhat similar paper in the Psychological Section, and then found that the mind that was really studied by the medical profession was the pathological or insane mind. This short paper on the sane mind concerns the medical profession generally, and is, therefore, in its right place in this Section.

The subject is important for two reasons—for its use, and its abuse. Two letters on this latter, called "The Borderland of Quackery," have appeared in the *British Medical Journal*, in which a good deal is said against the methods and finance of quackery, and but little against the cures, save in this remarkable sentence: "Quackery may be left to itself to stew in the juice of its hollow pretentions *(sic)*, and ultimately to perish as soon as the credulity of its victims has awakened to the fact that they have been duped." Metaphor and construction are here most obscure, and the meaning, though plain, will not be realised in our day. Quackery has been "stewing in its hollow juice" a long time, but the mess is still palatable to mankind, and will continue so as long as the public think so much of cures —as they do; and that cures are effected—as they are. Quacks have long exploited for their own unscrupulous ends that very force of mind so neglected by the profession, and the time has come when its physiological, pathological and therapeutical action must be seriously considered.

One great difficulty is the limitation of "mind" by English psychologists to "consciousness." This part of the mind has little direct power over the body in health or disease; whereas the subconscious mind has almost unlimited power. To understand the mental factor in medicine, the mind *as a whole* must be accepted, and not merely that part that is visible by consciousness. The mind plays a great part in physiology. The body is a complete whole, and an organic unity. This is greatly obscured of late in *teaching* and *practice* in the schools.

In *teaching*, our physiologies are increasingly scientific, and content with mere descriptions of mechanism, pretty much as a treatise on a motor-car might be written, and thus the true unity of the human being drops out of sight.

In *practice*, specialism is so rampant and the patient so segmented that the doctor who studies man as a whole is hard to find. Every system of the body varies incessantly in its processes according to the central guiding power, and never proceeds in the mechanical way many books suggest.

Passing on to pathology, hardly a man of the first rank exists who has not recorded diseases produced by mind. Those given by Wilks, Grabham-Lys, Clouston, MacKenzie, Sansom, Allbutt, Van Noorden, Murchison, Snow, Clarke, Bennett, and others, include most organic, and even infectious, diseases.

Turning to therapeutics, a ground swarming with quacks of all sorts, it may be well to state that I am no faith healer, Christian scientist, "pathist," or "faddist" of any sort, but take my stand upon legitimate medicine alone, as a plain medical man whose practice in nerve disease has led him to study this subject: and I say that the scientific study of psychotherapy is practically unknown to the profession.

Three disastrous results ensue—(1) the loss of the knowledge, (2) the loss to the patient, (3) the support given to quackery by driving patients to them who might be cured.

The following extract from a letter of Sir J. Paget to Sir H. Ackland makes this plain:—"What unsatisfactory cases these are! This clever, charming, and widely-known lady will some day disgrace us all by being juggled out of her maladies by some bold quack, who by mere force of assertion will give her the will to bear, or forget, or suppress all the turbulences of her nervous system." The picture this presents is amazing. We see these distinguished men calmly awaiting their inevitable disgrace at the hands of some bold quack in the cure of this clever and charming lady, whom they seem powerless to help.

What, then, makes such a picture possible? Can it be that the "bold quack" wields some power called "mere force of assertion," that the physician either does not understand or does not condescend to use? Yet sooner than stand disgraced by bold quacks it would be well if the profession tried it, and more especially when its effects on the patient is regarded so favourably by Sir James Paget.

Psychotherapy is exercised in two ways;—

1. Naturally, without medical aid, by the *vis-medicatrix-naturæ*, and it may be said broadly that no therapeutics avail without its aid, and where this is wholly absent recovery does not take place. The most a doctor can do is to assist the body in making use of this great power, which is nothing more than the action of the subconscious mind.
2. The physician can call forth further energies by the power of his personality, and conscious and unconscious suggestions, both direct and indirect.

The few who use these means do so empirically and distrustfully, as the knowledge has never been acquired scientifically in the schools as it should be.

Time fails to enter into details which could be given, and I conclude.

Gentlemen, the state of things I have described must be altered, and I hope my short appeal may result in action, and that in any case you will overlook the plainness of my words in the importance of my subject.

(a) Abstract of paper in Medical Section of the British Medical Association at Manchester, August, 1902 (not read for want of time).

INFANTILISM AND SENILISM. *(a)*

By HASTINGS GILFORD, F.R.C.S.Eng.,
Reading.

The word *infantilism* has been applied by the French to conditions of generalised delay or arrest of development, and the word *senilism* is applicable to the opposite condition of precocious development. These words are, therefore, to development what dwarfism and giantism are to growth.

Infantilism.

Infantilism, like dwarfism, may be due to natural causes. It is merely a variation of normal development carried to an extreme, and may be termed *normal infantilism*. An instance of this was given in which a girl of 15½ was of the height of a child of 6 years, but showed a sexual development like that which is normal at 12 years.

Morbid Infantilism.—Marked delay of development may be associated with disease of the thyroid gland, pituitary body, sexual organs, and other parts. Infantilism, in fact, like dwarfism, is produced by many causes.

Ateleiosis.—But there is one condition in which it is by far the most marked feature, but for which no cause can be discovered. This form of infantilism has received the name of ateleiosis, from ἀτελείωσις, not arriving at perfection. It may be distinguished by its abrupt onset without perceptible cause; by conspicuous infantilism with retention of the intelligence, and by a special tendency to delay of development of the sexual system. About a dozen cases have been described. The delay of development may be so conspicuous that a man of twenty-eight affected with the disease may resemble a boy of six or seven years, and may have a skeletal development which is usually met with at fourteen. The disease presents a distinct facial type. A typical case was described and shown, together with photographs of five others.

(a) Abstract of Paper read before British Medical Association Meeting, 1902.

Senilism.

Senilism, like infantilism, dwarfism, and giantism, may be merely a preternatural variation of normal development. Instances of this *normal senilism* were given.

Morbid Senilism.—Precocious development is usually associated with premature appearance of the sexual functions, and it may also be due to acromegaly, to mental shock, or to syphilis. Instances of senilism due to the first of these causes were then described, and a short account was given of the celebrated French dwarf Bébé.

Progeria.—After putting on one side cases of normal senilism and those which are the outcome of some known disease, a form of senilism still remains to be accounted for. This disease, which has received the name of progeria (πρόγηρος, premature old age) has certain distinguishing features. The onset is abrupt; it comes on without perceptible cause; gives rise to senilism of a very conspicuous character, and does not affect the intelligence. Only two instances of this disease are known, but they were extraordinarily alike. They strongly resembled each other in height, in form, facial characters, and in nearly every other respect. They died, one at seventeen from angina pectoris, and the other at fifteen from influenza combined with general failure of health and other indications of senile decay. In their later years their emaciated, wizened, bent, and feeble figures, combined with their baldness, their projecting veins and entire absence of elasticity of carriage, caused them to present a caricature, rather than a picture, of old age. Photographs of these and other forms of senilism were shown.

THE PATHOLOGY OF NERVE DEGENERATION. (*a*)

By PURVES STEWART, M.A., M.D.Ed., M.R.C.P.Lond.,

Assistant Physician to the Westminster Hospital.

In the course of his remarks, the author referred to Waller's paper in 1850 and to Ranvier's work in 1873, and followed this by a lantern demonstration illustrating the histology of the processes of nerve degeneration and of regeneration. He pointed out that degenerative changes occurred in the distal segment of a divided nerve whether it was sutured immediately or not. Primary union without degeneration did not take place. The degenerative changes also affected a small part of the proximal segment in the neighbourhood of the wound of division. The cellular changes in degeneration consisted, firstly, in a transient invasion by leucocytes, which was succeeded by connective-tissue-cell proliferation. By the end of five weeks the connective-tissue cells had absorbed all the myelin. The neurilemma cells, meanwhile, proliferated, became spindle-shaped and arranged themselves in longitudinal rows with overlapping protoplasmic processes. Fragmentation of the axis-cylinders and medullary-sheaths began on the fourth day. Regeneration overlapped degeneration in point of time. In the distal segment of a divided nerve, after primary suture, "spider-cells" shot out axis-cylinder processes from their opposite poles at the end of three weeks. These neuroblasts were the neurilemma cells and the overlapping threads fused together into a continuous axon. The new medullary-sheaths were similarly formed from the neurilemma cells. In a reunited nerve five months after reunion the nerve fibres had practically attained to normal dimensions. In the distal segment of a non-united nerve the process was essentially the same, but the new nerve fibres did not attain to maturity. The well-known "end-bulb" on the proximal segment of a divided nerve was formed at the outset by the curling back on themselves of the loose divided ends of the divided nerve fibres, and subsequently there was a deposition of new nerve fibres in it, derived from the neurilemma cells.

The deduction from these facts was that since regeneration occurred in the distal segment of a non-united nerve, the so-called "neurone" theory of Waldeyer could no longer be maintained. Dr. Stewart supported the fibrillar theory of Apathy, according to which the essential elements of the nervous system are the nerve fibrils. The nerve cells merely served as convenient shunts, and the central nervous system was one vast exchange transmitting nerve impulses from one part to another. The central nervous system, however, undoubtedly exercised a profound influence on the peripheral nerves, without which the new nerve fibres in the distal segment did not attain maturity. For the complete regeneration of a nerve fibre, therefore, two factors were necessary:—(1) The presence of neurilemma cells. (2) The re-establishment of conduction of impulses to and from the central nervous system.

France.

[FROM OUR OWN CORRESPONDENT.]

Paris, September 20th, 1902.

Cardiac Asthenia.

Professor Lupus has published an able article on the symptoms or stigmates of cardiac asthenia, that is to say, potential insufficiency of the heart. Amongst the most characteristic symptoms he mentions the inclination to yawning, especially in the morning and during the afternoon. The nights are bad, sleep superficial, and the patient rises in the morning tired.

Another sign is the imperfect peripheric nutrition of the body and revealing itself by continual exfoliation of the scalp, pityriasis, and the falling of the hair, of which the bulb, badly nourished, is extracted by the slightest effort, especially in women. Such persons become grey prematurely.

The influence of the heart on the bladder is well known. In asthenic patients there is more or less considerable stagnation of urine in the bladder on account of the low tone of the heart and the weak muscular contractibility of the bladder, but, what is less known, is the more frequent desire to micturate on account of the greater impressionability of the urinary receptacle.

Women suffering from cardiac asthenia frequently complain of pain in the sole of the foot and the heel. They imagine that they have been pricked by nails in their boots and continually examine them, but naturally none are found.

Other striking characteristics are palpitation, weakness in the limbs, especially felt in mounting stairs,

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(*a*) Abstract of Paper read in the Section of Pathology at the British Medical Association Meeting, August, 1902.

and fear. Children, for instance, suffering from the affection, are great cowards, afraid of darkness, &c.

The treatment should naturally be that of raising the muscular tonus of the heart. Small doses of digitalis, sparteine or convallarine, combined with nitroglycerine, will render good service. Professor Lupus recommends highly for the same purpose iodide, associated with tannin, as found in walnut leaves in the organic state. Consequently, preparations of walnut leaves, either in the form of decoction or extract, if given a prolonged trial. constitute the best treatment of the affection in question, especially in the case of children.

Germany.

[FROM OUR OWN CORRESPONDENT.]

BERLIN, September 20th, 1902.

THE *Deutsch M. Z.*, No. 71, has a reference to a paper by Dr. F. de Quervain on

THE ETIOLOGY OF PNEUMOCOCCAL PERITONITIS.

Most authors assume a primary pneumococcal peritonitis, and also a sharply defined symptomatology for it, especially in the case of women and children. This corresponds to the so-called idiopathic form of the disease. The writer adds two new observations to the sixty-two already recorded. The first case was that of a women of forty-nine, who had a large fluctuating abscess in the abdominal walls that made its first appearance a few weeks after an attack of influenza. The abscess was opened and contained only a few pneumococci. In the cicatrix, a few months later, a cylindrical-celled cancer developed. The second case was that of a girl who had symptoms of perityphlitis, and during the attack herpes labialis appeared. There was superficial dulness in the right lower abdominal region. An incision was made into this area of dulness, the subserous tissues were scarcely infiltrated, but the peritoneum was markedly thickened. On opening this about 300 grms. of greyish-white odourless pus escaped. Examination of this revealed numerous pneumococci in short and long chains. Recovery was very tedious. A slight broncho-pneumonia had also developed in the right lower lobe. Some months later a second operation was undertaken, when the vermiform appendix was removed by crushing. This showed a slight degree of infection, but otherwise appeared normal. For about five months after opening the abscess numerous pneumococci were present in the cavity ; its walls, however, were free from these or any other organisms. The writer believes the case was one of pneumococcal appendicitis, the infection probably arising from the interior of the appendix. The pneumococci of the pus killed mice in forty-eight hours with pneumococci in their blood. This was usually the case in such experiments. When they failed to act in this way the cause might be threefold. The varieties might be different from the first, or one might be dealing with a pneumococcus that had lost part of its virulence in the intestinal canal, or, lastly, the diminution in the virulence might be due to the simultaneous development of other intestinal bacteria in the pus.

Although in some cases the pneumococcus was not found in the vermiform appendix, the large proportion of cases in which the symptoms were most pronounced in the right side, or were exclusively located about the ileo-cæcal valve, pointed to the probability of the appendicular origin of pneumococcal peritonitis, most of the cases being characterised by a fairly uniform course. After a very stormy onset, there comes a period in which the focus is encapsuled, to discharge finally at the umbilicus. This depended on the biological characteristics of the pneumococcus. Other perityphlitic abscesses behaved in a similar manner so soon as the virulence of the micro-organisms had subsided.

The writer divides pneumococcal peritonitis into the primary and secondary forms. The infection of the peritoneum takes place through the blood or lymph channels. The following come into consideration as sources of infection :—The upper air and food passages ; the lungs and pleura (shown in fourteen cases), the infection passing *per commentatem* through the diaphragm, the stomach, and intestinal canal (*a*) by means of ulcerated new growths, &c. (four cases, all adults); (*b*) from injury ; (*c*) from the vermiform appendix (probable in eighteen cases) ; the female genital organs (only one probable case known).

Clinically primary form. To this group belong all cases in which no focus can be demonstrated.

The treatment does not differ from that of perityphlitic abscess from other causes, namely, incision of the abscess and subsequent removal of the appendix.

The *Berlin Klin.-Wochensch.* 22-23, 1902, contains an article on the

ALBUMINURIA OF PREGNANCY,

by Professor Veit, of Leyden, from which the following conclusions are drawn :—

By introducing a sufficiently large quantity of placenta into the abdominal cavities of rabbits albuminuria is set up. The pigment of the skin of pregnant women contains iron. The urine of pregnant women contains rather more iron than the urine of non-pregnant women. The blood serum of pregnant women only exceptionally contains hæmoglobin. The blood serum of women in labour contains hæmoglobin rather more frequently. The blood serum of the new-born child contains generally no hæmoglobin, but it has been observed as an exception. The author demands that the obstetric klinik should be furnished with a well-fitted laboratory in which the newer methods of investigation can be carried out as regards chemistry, physics, and physical chemistry. Obstetrics not only strive to deliver the woman in the best possible manner, but also aim at the improvement of our knowledge as regards the influence of pregnancy on the organism. The more the favourable influence of pregnancy on the woman becomes known, the better shall we know how to avoid harmful consequences by the powers of nature, and the better will the well-being of woman be ensured.

Austria.

[FROM OUR OWN CORRESPONDENT.]

VIENNA, September 20th, 1902.

COMPLEX SYMPTOMS OF BANTI'S DISEASE.

At the "Gesellschaft für Innere Medicin" Weinberger exhibited a patient suffering from symptoms pointing to Banti's case. The patient was 30 years of age, and seven years ago suffered from a severe attack of malaria which lasted four years, and then ceased on his changing his residence to a healthy climate. Later, however, he suffered from a very severe anæmia, which had lasted up to the present time. Two days before his admission into hospital he had had an attack of severe hæmatemesis with black stools.

On examination he found severe anæmia, enlarged spleen, well-marked ascites, liver small but hard, indicating some structural changes. Although his first impression was that the case was hopeless, the patient rapidly improved under arsenic and iron administration, gaining in weight, strength, and vigour under a generous diet. The ascites disappeared, and within two months he was feeling perfectly well. To complete this recovery he went into the country.

On admission the hæmoglobin was 20 per cent., on his departure 55 per cent., while the proportion of leucocytes was reduced.

These complex symptoms have a close resemblance to Banti's case, in so far as the chronic enlargement of the spleen is the primary cause of the anæmia and hæmatemesis with subsequent recovery. In both cases ascites was present, but in this case the interstitial changes of the liver were not so clearly explained, although they quite disappeared. The presumption is that the sudden appearance of the ascites, with the hæmatemesis and its subsequent disappearance, was due to a thrombus in the portal artery which became absorbed. It could hardly be a sclerosis of the artery such as Banti found post mortem, or the speedy recovery would not have been so complete.

Lightning Injury.

Jellinek next showed a man who had been struck by lightning twenty-six days previously, rendering him unconscious for a time. After recovering consciousness he complained of great pain in the back and legs. The hearing, bladder, bowels, and muscles of the legs were affected, and there was tenesmus, with anuria and cramp.

Jellinek saw him on the sixth day after the accident and noted as follows: Dulness of hearing, muscular power in legs almost nil, while the cutaneous appearances were characteristic. At the lower part of the spine, on approaching the nates, was an area about the size of the hand, with irregular edges, a dark brown hard leathery surface, which, when percussed with a rod, scalpel, or pencil, yielded a ringing sound.

Running out from the margin of this brown hard surface were red lines extending to the great trochanter, down the legs and round the buttocks, giving the area a curious red appearance, with here and there a number of small blisters. The hair on the outer side of the leg, as well as the pubis and perineum on the left side, was singed. On account of the severity of the case, he was removed to Schrotter's ward, where he has generally improved both in respect of the cutaneous and nervous symptoms. The lesions are characteristic of the injury caused by natural and artificial electricity. There was no burning of clothes over the part; indeed, they could hardly be said to be singed, although such an extensive burn was to be found on the body, where the current appears to have spent its force at the point of entrance, radiating far and wide under the clothes, singeing the hair and burning the skin.

Prophylaxis of Mercurialis Stomatitis and Proctitis.

Bockhart draws attention to the treatment of mercurial stomatitis by the use of paste or tooth powder which has been effective in the prophylaxis of the disease, as well as the treatment of the disease. Bockhart uses a powder for the teeth which contains 50 per cent. of the chlorate of potass with perfect success. Its efficacy lies in the powerful oxidising property of the chlorate, which speedily acts on all decomposing organic matter. He always prescribes this paste when administering mercury, which entirely prevents salivation in syphilitic patients. In proctitis mercurialis, as well as stomatitis, this prophylaxis is equally efficacious.

Tabes and Mercury.

Bockhart next gave his experience of administering mercury in tabic diseases, which he has practised in the interstitial atactic and initial stages with great success. Instead of the heroic twenty-five or fifty rubbings or inunctions, he prefers to use three to six grammes of the ointment in small quantities extending over twenty to twenty-four inunctions at a time, which might be repeated after a periodical cycle, but not exceeding 2·5 grammes at any of these periods of twenty inunctions. During the treatment warm baths of 25° to 27° Reaumur, or 88° to 94° Fahr., should be taken, but not to extend beyond ten or fifteen minutes at any time, while rubbing should be performed at the same time. The patient should have ten hours' rest in bed at night and two in the afternoon every day. No extraordinary efforts should be made, on the contrary rest, but open air in abundance should be provided. Tobacco and alcohol should be sternly prohibited. This form of treatment should be persevered in for years. He had under his care sixty-nine cases of tabes recently, and in the whole number observed three only who had the slightest symptom of mercurialism; fifty-eight of these came under his care in the initial stage and eleven in the atactic. In fourteen of the cases, or 20 per cent., a perfect cessation of the disease took place, all the tabic symptoms disappearing, even to the patellar reflex and pupillary paralysis; the others were free of pain and felt well.

Although his statistics are yet low on the subject, he thinks this small success warrants a repeated trial of the treatment.

Stypticin.

Kaufmann's stypticin is now gaining favour as a local hæmostatic in case of warts, piles, &c., from which bleeding is often profuse. It is a salt of cotarnin having the formula $C_{12}H_{14}NO_2Cl$. It has been used with success in urologic operations of the bladder, such as endoscopic examination, Oberlander-Kollman operation for dilatation of the urethra, &c., combined with oil cacao, or gelatine, according to the following formulæ:—

R. Stypticini, gramme 0·03 to 0·04,
Olei cacæ „ 1·5 M.

Fiat bacilli urethrales longitudine 10 c.m., crassitudine 4 m.m.

When applied to a bleeding surface after the removal of condylomata or wart, wadding soaked with a solution of 30 per cent. of stypticin is all that is required.

Credeism in the New-born.

Leopold, of Dresden, has attracted attention from his avowal and advocacy of Crede's method of administrating nitrate of silver in a dilute form to the eyes of new-born children to prevent subsequent inflammation

Since 1898 he has practised this method on 2,146 cases, with only three attacks, or 0·14 per cent. of the cases. He formerly used a 2 per cent., but he thinks a 1 per cent. is sufficient for preventing an ordinary case of blennorrhœa.

Pulmonary Phthisis Treated by Cutting the First Costal Cartilage.

Freund startles the surgeon with an announcement that he now cures pulmonary disease by severing the cartilage of the first rib, and allowing the apex of the lung more room to expand, and thus expel by its freedom of expansion and contraction all poisonous matter that may lead to primary destruction of lung tissue. He contends that this stenosis is the cause of bacillary arrests and final destruction, and cites cases where the lung has quite recovered under this treatment of extended aeration, even after the bacillary condition of the lung has set in.

Pyometra in Uterus Bicornis Puerperalis.

Senger relates a case of uterus bicornis. The right horn was well developed and did not communicate with the left till it reached the vagina. The right cornu was alone fitted for pregnancy, while the left contained blood and other secretions. The history gave an account of severe pain at the menstrual periods. After confinement pain commenced in the left cornu, which became closed, retaining the blood, secretion of mucus, &c., till all assumed alarming dimensions. The sac was first opened and all the purulent matter cleared out, and nine days later the left cornu was extirpated with perfect recovery.

Serous Osteomyelitis or Meningocele?

Schrank relates an interesting case of a child, æt. 4, who, after a fall, developed a swelling about the size of an apple on the back of the head. Fluctuation, pulsation with a walled bony margin, could be easily diagnosed; sometimes it could be moved, which retarded the pulsation. A test puncture revealed a hæmorrhagic fluid with imperfectly-formed round cells. The diagnosis was a meningocele. On opening up the part, the cranium was found to be necrosed with the dura mater swollen out and covered with a cheesy mass, but nowhere could perforation be observed. The diagnosis was changed to sequestral osteomyelitis.

Continental Notes.

[FROM OUR SPECIAL CORRESPONDENT.]

THE "EMPEROR FREDERICK SPRING."

This mineral spring is situated at Offenbach, near Frankfort-on-Main, Germany. The borings in connection with it occupied several years, being only completed in 1888. The spring has its origin at the depth of 275 metres in a rocky formation, which is a guarantee that the water is in no way affected by meteorological conditions. When first struck, in February, 1888, the yield was so strong as to immediately give thirty hectolitres per hour. By the autumn of the same year, its discharge (at the surface of the ground) had increased to sixty hectolitres per hour, and now it equals 180 hectolitres per hour. The water is quite clear and colourless, has some free carbonic-acid gas, is sparkling, free from odour, and with a mild, soft, slightly saline, and pleasant flavour. Temperature averaging 19° Cent.

In a report (accompanying analyses of the water made by Dr. T. Petersen, of Frankfort, Dr. Hintz, of Wiesbaden, and himself), Professor R. Fresenius, of Wiesbaden, states, "The Emperor Frederick Spring at Offenbach-on-Main; forms an intermediate link between the mineral waters, described in balneological phrase as alkaline-muriated waters, because of their chloride of sodium and bicarbonate of soda ingredients, and those designated alkaline-sulphurous waters on account of their containing, in addition, sulphate of soda. The Emperor Frederick spring is distinguished by its relatively *high percentage of bicarbonate of lithium;* it differs likewise from similar mineral waters by its very small percentage of bicarbonate of lime, bicarbonate of magnesium, biroto-carbonate of iron, and of free carbonic-acid gas."

A bacteriological examination made in the laboratory at Wiesbaden, by Dr. Fresenius, of the water specially taken for this purpose by Professor Hueppe, M.D., Director of the Bacteriological Section of the Wiesbaden Laboratory, proved the Emperor Frederick spring to be totally free from germs.

In a pamphlet containing the opinions and experiments of eminent Continental medical authorities (which can be had free, as also sample bottles, from Messrs. Ingram and Royle, Limited, of London) are strong recommendations of the Emperor Frederick spring for the removal of the secretions of uric acid, gout and stone in the kidney, catarrhal affections of the respiratory and digestive organs, gastric catarrh following influenza, chronic interstitial nephritis, renal calculus due to uric acid, arthritic troubles, dyspepsia, &c., &c. The Emperor Frederick spring is greatly commended as a table-water, being very pleasant to drink, digestible, preserving (in bottles) its purity, flavour and sparkling characteristics for many years unchanged, and, although for a long period continuously and most freely drank, it produces no deleterious after effects.

The Operating Theatres.

WESTMINSTER HOSPITAL.

Operation on a Case of Acute Necrosis of the Femur.—Mr. **William Turner** operated upon a boy, æt. 3, who had been admitted eleven days previously with a sinus on the outer side of the left thigh at the junction of the lower and middle third, which was discharging very freely; the temperature was 102°, and the child was suffering from signs of septic absorption. There was considerable thickening of the bone in this region, and the knee-joint contained a small quantity of fluid. The history of the case was that the child had a fall in July, and was severely bruised below the trochanter on the left side; this got better, but early in August an abscess formed just above the knee, which pointed and was opened. On September 6th, the day of admission, the sinus was enlarged and found to go down to the bone, and a flake of necrosed bone removed, but as the child was extremely collapsed it was decided to postpone further treatment until his general condition improved, which occurred, but the local condition did not improve, and onthe day of operation there was abundant discharge of pus, and the swelling of the lower third of the thigh had not diminished. Chloroform was administered, and the skin having been thoroughly purified, the sinus was explored with a probe, which immediately struck bare bone; the opening was then enlarged downwards and upwards, and the outer surface of the lower third of the femur found to be stripped of periosteum as far as the linea aspera; the probe then passed in front of the bone into a large sub-periosteal abscess on the inner side, which was evacuated and drained by a second incision on the inner side of the thigh, just in front of the line of the femoral artery. A gouge was then used to open into the medullary cavity of the bone, which was found to contain pus and breaking down medullary tissue; this was enlarged upwards with cutting forceps until healthy medulla was reached, and the whole purulent material scraped away with a sharp spoon, until nothing but a shell of compact bone remained. The cavity was well washed out with sterilised water and stuffed with gauze soaked in iodoform and glycerine emulsion, and the ordinary dressings of double cyanide gauze and salicylic wood applied. There was a considerable amount of oozing during the operation and the child was very collapsed, necessitating the exhibition of hot brandy and water as a rectal injection and a hypodermic injection of strychnine. Mr. Turner said that the case was very instructive, and had many points of interest connected with it; it was undoubtedly a case of acute necrosis, or better, infective panostitis, in which suppuration supervenes on an injury without any open wound, *i.e.*, the micro-organisms infect the injured part from within—then, owing to the fortunate circumstance that the subperiosteal abscess on the outer side had made its way to the skin and the abscess was opened, the knee joint below and the rest of the femur above had not become infected, and so the condition was more or less localised, and thus for more than six weeks had been running a somewhat sub-acute course, during which time no severe constitutional complications such as pyæmia or septicæmia had supervened. Mr. Turner then pointed out that the operation for cases such as this consisted essentially of two parts, first the evacuation and thorough drainage of the sub-periosteal abscess, and then the opening-up of the medullary cavity and removal of the pus therein, *i.e.*, the treatment of the suppurative periostitis as well as the osteomyelitis; and the treatment of the former without the latter only leads to the disastrous result of either spreading osteomyelitis and central necrosis of the whole diaphysis, or more likely to pyæmia. He explained that it was impossible to remove all the compact bone affected, most of which would in this case ultimately necrose; as if so, two results would follow, first a fracture of the bone would be produced, and secondly, the periosteum would fall together and lay down a very small amount of bone, probably not strong enough to form a new femur for the patient's weight. Mr. Turner then discussed the prognosis, and stated that he considered it very serious. First, as to the life of the patient; his age (only 3), his prolonged illness of over six weeks, and the shock of the operation made the general condition extremely grave; but he hoped that with care the child would improve, and, provided that he did not get any general septic infection, as septicæmia, pyæmia, or hectic, would ultimately recover; and secondly, as to the local condition; here many complications might occur, especially the spreading of the suppurative process into the healthy medulla, or into the knee-joint; and, later, the damaged periosteum might be unable to lay down a new bony femur, owing to the destruction of the osteoblastic layer. Any of these three would probably only be satisfactorily treated by amputation; and, again, the epiphysis was in close proximity and might become affected either from the inflammatory process or from injury during an operation. At the best the boy would have to be operated on again to remove the dead bone, which was already present, but unable to be removed. He further observed that it was most essential to understand the pathological process before attempting to operate on cases of this kind, the suppurative osteomyelitis being most likely to be overlooked; and that a good result depends first on the thoroughness of the operation and great care in the after dressings, so as to be ready for any emergency.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, SEPTEMBER 24, 1902.

THE FUTILITY OF UNDIRECTED OBSERVATIONS.

In a paper on meteorological research read before the British Association last week by Professor Shuster, the author insisted on the futility of undirected observations, adding that "science is bred on routine, and drudgery is often its highest ambition." He pointed out that recent advances in the science of meteorology very rarely depended on the accumulation of vast quantities of material; indeed, he was of opinion that science had advanced "in spite of the observations and not on account of them." These remarks, it is to be feared, might with equal justice be applied to medical science, which, like meteorology, is in danger of being weighed down by the accumulation of unclassified and undigested observations. We are at present groping in the dark in many departments, and we go on observing everything, and for ever, in the hope that at some time in the future the observations may prove useful. Our whole point of view in this respect requires altering. As the Professor urges, we ought to fix on our problem first, and then provide the observations which are necessary for the solution of the problem. It is quite conceivable that concentration of attention for comparatively short periods of time on special questions might yield better and more practical results than heterogeneous observation on a large scale. Mere data, that is to say observations made for their own sake and not for some definite scientific object, are useless, indeed worse than useless, because they encumber the shelving space in our brains which, after all, is not unlimited any more than the shelving space in our libraries. Mere facts are like bricks, which merely occupy useful space until they are sorted and placed in position by the builder. The value of food to the organism is not directly proportional to the quantity ingested, but to the amount digested and assimilated. It follows that in recording observations every effort should be made to explain and elucidate their bearings on some problem which awaits solution. The faculty of careful observation is not rare, but the ability to co-ordinate observed facts and to make them contribute their quota to the advancement of medical science is one of a much higher order, inferring, as it does, an intellectual capacity vastly in excess of that required for even minute observation. We see this clearly enough in the evolution of "new diseases," new, that is, in the sense that, although the individual symptoms and lesions had long before been observed, their relationship and interdependency had escaped recognition until a master mind gathered up the stray threads and demonstrated their pathological unity. The principal phenomena of renal disease must have been familiar to physicians for many years, but their observations bore no fruit until Bright, making observations of his own with a definite object in view, succeeded in proving the association of certain symptoms with particular organic lesions. It may be urged, on the other hand, that the making of observations with a definite object in view is a procedure as fallacious as that of asking leading questions, in that the observer is but too apt to place a construction on his discoveries in harmony with his preconceived idea. But to have a definite object in view is not the same thing as to have a preconceived idea. The observer with a definite object asks himself, Is it so or is it not? whereas the fixed-idea man seems to say, Is it not so? We must not set to work to collect facts in support of a hypothesis, but must conscientiously take into account the facts which militate against it, as well as those which tell in its favour.

CRIMINAL ANTHROPOMETRY AND THE COMMON SERJEANT.

The introduction of scientific methods in criminal procedure may safely be said to have ushered in a new era so far as the identification of individuals was concerned. Hitherto, the police were perforce compelled to trust to written records and to memory of colour, features, height, and other details subject in the nature of things to more or less variation. The patient genius of Bertillon, however, changed all that by the elaboration of the system of anthropometry, which is infallible, at least, so far as any technical test of the kind can approach infallibility. The Bertillon system has been years ago described in the columns of The Medical Press and Circular, and its adoption strongly urged upon the Government of this country. The method in question, it is hardly necessary to remind our readers, depends upon a number of measurements, such as the radius, the phalanges of the digits, the cephalic lines, the cornea, the skin surface of the finger-tips, and other parts of the body that remain constant under ordinary conditions. By reference to the Bertillon record the identity of a prisoner may be determined, humanly speaking, with absolute safety. At the same time it should be carefully noted that the essence of the system lies in the grouping together of the peculiarities of each individual. Thus, twenty men may have a right radius of precisely the same length, and five of them be further possessed of second phalanges of the right index finger of corresponding length, but these five might all be differentiated by their occipito frontal dimensions and by their finger-prints. It is evident, therefore, that to trust to any single detail is to court fallacy. Bearing these points in mind, it is interesting to note some of the early fruits of the adoption of the Bertillon system in the United Kingdom. The case of Harry Jackson, recently sentenced to seven years' penal servitude by the Common Serjeant, is sufficiently startling. The case against accused appears to have been weak, and the whole sentence hinged on his identification by means of some finger-prints. If judges and juries in future propose to depend on isolated facts of this kind we have no hesitation in saying that the door will be at once opened for grave miscarriages of justice. To convict a man upon his finger-prints alone would be to reduce the Bertillon system to a sham. Besides, we have not even the assurance that the finger-prints were recorded by an expert medical authority. To sentence a man to seven years' penal servitude for a small offence against property is, in our opinion, a savage and unjustifiable punishment. To do so upon the strength of a system so mutilated as to be practically worthless is to reduce British justice to the level of a farce. If the Home Office does not wish to become the laughing-stock of more logical countries the sentence upon Harry Jackson will be speedily revised. It is to be hoped that some member will call the attention of the House of Commons to the subject immediately upon the reassembling of Parliament.

THE ANTI-MOSQUITO CAMPAIGN.

Some recently-published statistics direct attention to the expenditure of time, labour, money, knowledge, and intellectual abilities, which are being devoted to the problem of the destruction of the malaria-bearing mosquito by the Governments of the United States and Great Britain. Mr.

L. O. Howard, of the United States Department of Agriculture, refers to certain communities where, throughout the summer, and especially in the autumn, there are two or three cases of malaria in every household. Of every 100,000 deaths which occurred in the United States "from all causes," in 1860, 3,976 were attributed to malarial fevers. In 1880, this proportion had fallen to 2,673. In the year 1892 the statistics of our Indian Empire attributed 5,000,000 deaths to "fever"—a very high percentage of the fevers of India are always malarial. In 1897, nearly one-third of the members of the British Army in India were treated in hospital for malarial fevers and their sequelæ. In Italy it is estimated that 2,000,000 of the population suffer annually. The average yearly death-rate in that kingdom, from 1887 to 1897, from malaria alone was 15,000. And the recorded actual *death-rate* from malaria is but a faint expression of the suffering and misery which are caused by the varied effects of the poison of this plague. There is no way of obtaining a trustworthy record of the number of persons whose constitutions are hopelessly wrecked, or who are partially disabled, or—permanently or temporarily—incapacitated for work by the infection. If there were, the data so obtained would surely be startling. What makes it so excessively difficult to obtain good malarial statistics is, that this pestilence displays its worst ravages in remote rural districts. If Charles Dickens had lived to see this day, he would —peradventure—have been glad. If he had been gifted in his life-time with sufficiently telescopic foresight, he would probably have added, in his own inimitably graphic way, a most effective and important feature to the thrilling landscape picture which he has bequeathed to us of the promised Western City of *Eden*, as it flashed upon the bleared eyes and sinking hearts of Mark Tapley and Martin Chuzzlewit. Within and around the group of uncouth cabins which formed that "city" of the malarious swamp, he would have placed swarms of hungry mosquitoes, ready to pounce upon the newly-arrived and full-blooded English adventurers; and to inject into the blood of the latter, in heartlessly treacherous compensation for the portion which they had withdrawn by suction, the zygoblasts of the now familiar germ of malarial disease. The picture of an ague-stricken district drawn by the immortal novelist is a true as well as an impressive one. And such localities exist not only between and near the tropical zones, but far off to north and south. The whole northern half of the Australian continent is so characterised; and, in the Northern Hemisphere, the low situation of Holland and Belgium insure a liberal share of malarial infection. There are spots even in Sweden and in Siberia patronised by this plague; and—we are told—in Greenland! We confess to a desire for very special corroboration in the last case. The fenny districts of England and the margins of the great bog of Allen, in Ireland, are, we believe, not even yet quite free from "the shakes." The shores of historic Clontarf knew it more than eight centuries after the expulsion of the Danes. Mr. Howard tells us that "there still exist, in many portions of the United States, localities where quinine is a daily article of diet, and where the recurrence of the fever and the shaking-fit are as implicitly to be relied upon in most families as the rising and the setting of the sun. The emaciated form, the sallow colouring, the yellow eyeball, and the utter indifference to the world at large which result from malaria when almost chronic, still characterise almost the entire population of certain more or less restricted portions of the United States." And now that the campaign against the malaria-bearing mosquito has commenced in good earnest, we hope that it will be carried out without intermission —and without mercy—to the end.

Notes on Current Topics.

A Much-Criticised Vaccination Report.

THE report which has been submitted to the Metropolitan Asylums Board by Dr. W. J. J. Stewart, bearing on the vaccination of workmen at the Gore Farm Lower Hospital, has afforded much material for discussion by the anti-vaccinationists. The first point to which exception is taken is the payment of five shillings per head to the men to induce them to consent to be vaccinated. It is regrettable, of course, that it should be necessary to bribe men to acquire immunity to a frightful disease, but the fact remains that, without some such inducement, many of them are too short-sighted and indifferent to submit thereto, and it is obviously vastly more economical to get their consent even at this price than to be saddled with the expense of maintaining a certain proportion of their number for many weeks. The next point is the large proportion of vaccinated men who developed septic complications. This, however, has nothing to do with vaccination, being merely the result of want of care and of defective personal hygiene. Three of them, it is noted, were laid up with "pustular eczema," whatever that may be. It is possible that vaccination, like any other temporary disturbance of the general health, may precipitate an outbreak of eczema in those predisposed thereto, and three is not a large proportion among 503 beer-drinking workmen. Lastly, some 28 per cent. of the vaccinated were disabled for a variable space of time, a point upon which great stress is laid, as though it were not obvious that even an "average arm" must needs entail some disablement in men engaged in hard manual labour, a comparatively trifling amount of inflammation sufficing to incapacitate such persons, especially when their wages are to be paid whether they work or not. The report illustrates the difficulties which would be entailed by any scheme of revaccination undertaken on a large scale at one time. If proper provision were made for compulsory revaccination at a stated age, the inconvenience being spread over several years would be reduced to manageable proportions. We are, however, confronted with the objection that if labouring men are to be required to undergo revaccination, some provision which will enable them to live during the period of incapacity for work appears indispensable. If, however, all persons were revaccinated, say at the age of twenty, the inconvenience would be reduced to a minimum. An aching tooth cannot be extirpated without pain and subsequent distress, nor can we obtain immunity against small-pox without some slight sacrifice of comfort.

Fraudulent Misrepresentations and Promises to Marry.

When a man marries he takes the woman "for better or worse"; the law assumes that he has taken cognisance of all moral and physical qualities and shortcomings, short of extreme anatomical defects, and that he is prepared to enjoy, or, at any rate, to endure, them. He is no longer entitled to plead that the woman he has selected is not of the "nature, quality, and substance demanded," still less is he entitled to plead fraudulent misrepresentation on the part of the lady unless this bear on the essential conditions of the legal union. It is for the prospective husband to make sure that his prospects of matrimonial happiness repose on a sound basis. Presumably, therefore, he would be entitled to plead "disillusion" at any period previous to marriage should he discover that his *fiancée's* teeth were artificial, her hair very largely adventitious, and that, in other respects, her charms were unduly enhanced by meretricious arts. These reflections are suggested by an action for damages in respect of breach of promise of marriage recently tried in the High Court of Justice at Bombay. The defendant urged in justification of his change of front that the plaintiff had fraudulently concealed from him the fact that her teeth and gums were diseased, and that the former were mostly artificial. It is, obviously, a rather risky defence to make, because unless successful the jury might consider that the defendant was adding insult to injury. Nevertheless, it would have been interesting to have a judicial pronouncement on this very delicate subject. Not improbably a sympathetic jury would confirm the adage that "all's fair in love and war," in other words, that Jove laughs at lovers' perfidies. Unfortunately for our information the defendant "climbed down" at the critical moment, and consented to offer the heartbroken plaintiff a substantial sum by way of compensation. The precise extent to which women may artificially enhance their charms and disguise their infirmities remains, consequently, a moot question, and in practice it will be found more convenient to abstain from promising marriage until all doubts have been removed than to seek to evade its realisation by pleading fraudulent misrepresentation.

Coleridge on Cancer Research.

That worthy but misguided enthusiast, the Hon. Stephen Coleridge, continues to fulminate his illogical decrees against orthodox medical research. In one of his latest communications to a London newspaper he attacks the Middlesex Hospital because it chronicles no practical advance in the treatment of cancer in its recently-published volume of special research. The vials of his wrath and satire are chiefly poured out upon the technical description of the blood in cancer. "The utter failure of these researches," he complains, "is delivered to the world in a language that includes such terrific words as these: 'polymorphonuclear leucocytes,' 'eosinophile,' 'poikiloblasts,' 'megaloblasts,' &c." In the non-progressive profession of law, with which this enthusiastic gentleman is connected, we can readily understand there is little need of new words or phrases to describe with accuracy the fruits of fresh discoveries. Scientific medicine, however, is content with the patient accumulation and record of facts and of careful reasoning therefrom. Some day, there can be no doubt whatever that medical men will discover the cause and the cure of cancer. That they will achieve the victory in their own way is equally certain. The alternative routes of investigation suggested by the Hon. Stephen Coleridge are precisely those that would appeal to a scientifically ignorant and untrained mind—to wit, the consumption of meat, tobacco, beer, salt, and the use of curative antitoxins. Fallacies of the kind suggested by this shallow critic of medical methods would be excluded from the essay of an average medical student, to say nothing of the highly-cultivated and candid minds of our skilled scientific investigators.

Earrings Again.

It is stated, on the authority of certain Society papers, that the practice of wearing earrings, a fashion which, we had hoped, had definitively fallen into disuse, is to be revived, the example having been set in high quarters. We trust the announcement is a silly-season invention, since, from every point of view, this relic of a barbarian ancestry stands condemned. Even when the custom was in full swing, that is to say, in the crinoline and ante-crinoline days, people felt it necessary to attempt to justify the mutilation on other than purely æsthetic grounds, and a legend gained currency to the effect that the wearing of earrings afforded immunity against certain chronic inflammatory conditions of the eyes, or, rather, of the eyelids. It is hardly necessary to observe that the belief has no scientific foundation, seeing that such inflammatory affections are, almost without exception, of infective origin, and are amenable only to antiseptic medication and general hygiene. This particular phase of self-embellishment is only one step more ridiculous than the bediamonded crescent which elderly ladies flaunt, without reflecting upon the original significance of that souvenir of Diana, the huntress, and the pictorial tattooing dear to the artistic imaginations of savage peoples. Formerly an integral part of all feminine decoration, earrings have for many years been patronised only by the feather-adorned maidens of the East End, and it would indeed be a strangely retrograde step should their use again become general.

Education and Self-Control.

There is no question on which it is more difficult to obtain any agreement than that of the aim of education. Too often nowadays, amid the multiplicity of the subjects that engage our attention, we are apt to slip into the assumption that the education of the young should be simply an endowing of them with useful information, to be afterwards turned to account in the earning of their living. Nothing is farther from the truth than this. Even from the most extreme "bread-and-butter" point of view, the character of a young person entering on life is of vastly more importance, in regard to his prospects in the world, than the quantity of knowledge he has stored up, and consequently the development of character more than the imparting of information should be the aim of a good teacher. And whether viewed from the individualistic or the socialistic side, no point in the character is of more value than the habit of self-control. "He that ruleth himself is greater than he that taketh a city." The whole subject is well discussed from the point of view of an alienist, by Dr. Hattie, of Nova Scotia, in the August number of the *Canada Lancet*, and we are thoroughly in agreement with his conclusion that not only is self-control "a potent agent in the prevention of mental disturbance, but also a very important factor in determining recovery from an attack of mental disease."

The Psychology of Modesty.

Much has been written concerning the advantages of a "mixed audience" in the maintenance and development of modesty. In the special reports on Educational Methods in the United States, recently published, the headmaster of Keswick School deals with the question of the education of both sexes in one institution. He holds that such would be favourable to refinement and morality: "Richter's sentence, oft quoted in America, puts the case concisely, 'To insure modesty I would advise the education of the sexes together; for two boys will preserve twelve girls, or two girls twelve boys, pure amidst coarse jokes and suggestions merely by that instinctive sense which is the source of natural modesty. But I will guarantee nothing in a school where girls are alone together, and still less where boys are. The monastery system is the one point where our boarding-school system touches the French, and probably it is the worst." In the best interests of the highest sexual development it is most desirable that all that makes for the retention of true modesty should be encouraged.

The Silly Season in Medical Journalism.

The alert medical man, on reading the above heading, will at once prick up his ears and ask, What is the silly season in medical journalism? Let him take comfort and learn that, like the snakes in Iceland, there is no such season in the workaday world of medicine. This particular science is progressive fresh facts are discovered daily, and the ball lies at the feet of every investigator in this, the greatest of all intellectual pursuits. At any moment it may be given to the humblest practitioner to make some observation that will confer on him the laurels of immortal fame. The medical journal, as a matter of fact, has the command of a vast range of subjects, scientific and social, which are full of living interest and actuality. In the lay newspapers, at certain times of the year, the big gooseberry jumps into prominence as a topic of entrancing interest. Recently we have seen variations by way of huge marrows and melons five feet long. It is a poor medical journal, however, that has to fill its space with trite and trivial gossip of that texture. The world of medicine and its workers live in a whirl of events of multitudinous variety, the consideration of which affords material for every faculty of the mind

The "Moorfields" Eye Hospital and its Finances.

The Committee of the Royal London Ophthalmic Hospital, better known to the world by its old name of Moorfields, continues to call attention to the financial straits of that institution. The trouble arose from selling the enormously valuable old building, where they lived rent free, and by their subsequent emigration into another district, where the hospital became quickly swamped by the burden of local rates and the cost of bricks and mortar. The committee have themselves to thank if they are compelled to close the hospital, a step that is announced as not impossible in the near future. Their position is of value in reference to the announced sale of the Royal Orthopædic Hospital in Oxford Street. Here also an enormously valuable site has been disposed of without compulsion, and the institution is to be removed to a distance. The sale has been strenuously opposed by a section of the governors and by the medical journals, but has nevertheless received the sanction of the Charity Commissioners, who are presumed to have the interests of the chartered medical charities at heart. We shall watch with interest the upshot of the sale of both these hospitals, especially as no satisfactory reasons for the sale have been vouchsafed in either case.

Primary Carcinoma of the Vermiform Appendix.

Vestigial structures are, to a great extent, exempt from neoplastic formation. It was formerly held that the cæcal appendix was an embryonic remnant, and certainly up to recent years but few cases of growth arising in it have been noted. Examples, however, are gradually accumulating. Dr. D. S. D. Jessup (*New York Medical Record*, August 23rd), after recording a case of adeno-carcinoma of the cæcal appendix, gives brief references to thirteen cases which he has been able to collect from medical literature. Nine of the cases were females. Two cases were under twenty years of age and four under thirty. There was a history of appendicitis in seven. In no case does the growth in the appendix seem to have been diagnosed during life. The opinion is expressed that routine microscopical examination of all the appendices removed will doubtless in the future show that carcinoma occurs in the appendix more often than has hitherto been thought.

The Matriculation Examination of the University of London.

We are requested to call attention to the fact that it is no longer *necessary* for candidates for degrees to have passed the Matriculation Examination. As will be seen by reference to pages 14 and 29 of the "Revised Regulations for Matriculation," exemption from this examination is under certain circumstances granted to graduates of British Universities and of the more important colonial and foreign Universities. The full text of the Statute and the Regulation governing this exemption is set forth on page 29. In future the Matriculation Examination will be held three times a year instead of twice—in January, in June (or July), and in September. The examinations in January and June (or July) may be held not only at the University, but also, under special arrangement, in other parts of the United Kingdom and in the Colonies, but that held in September is conducted solely in London. No examination will be held after June next under the old regulations.

Albuminuria and Exercise.

The occurrence of albuminuria in health is always a possibility to be remembered, and in no case should a physician be satisfied with one examination of the urine when he has to base an important decision on the presence or absence of albumen. The association of the excretion of proteid with severe muscular exercise has been investigated by Leube, Stirling, Levison, and others, and their observations go to show that albumin very commonly appeared in the urine immediately after exertion, while no relationship with the food taken could be established. A very valuable investigation of the same nature has been concluded recently by Messrs. Dunhill and Patterson, medical students at Melbourne (*Intercolonial Medical Journal*, July 20th), who made a systematic examination of the urine of a boat's crew under severe training, and of a hare-and-hounds team after a long race. In the latter set, a distinct quantity of albumin was present in the urine of each competitor, while in a control experiment in the absence of exercise on the urines of the same persons, no albumin whatever was detected. Most of the rowing men also excreted albumin after exercise, and the quantity bore a very marked proportion to the work done. The authors of the paper quoted are to be congratulated both on the value of their results and on the excellent manner in which they are published.

Surgical Toilet.

The development of the personal toilet of a surgeon in preparing for operating has lately advanced on the Continent to a degree we are unfamiliar with in this country. The newspapers have just been telling us that surgeons who obey rigidly the dictates of asepsis must devote their beards in the interests of their art; but we think few, if any, of our surgeons at home have as yet done so. In these countries, surgeons when preparing to operate do little more than put on a sterile coat and cleanse and disinfect their hands thoroughly, though some are in the habit of wearing gloves, either of cotton or rubber. Not so with our German friends, who endeavour to hedge in the insiduous microbe by arming themselves literally *cap-a-pie* in sterile clothing. We quote a full description of the ritual observed in the Breslau Clinic from a recent article by Mr. Purves, of Edinburgh (*a*):—"The surgeon and assistants remove coats, &c., in the anteroom and put on goloshes. The seniors also put on clean linen trousers. (Why not the juniors?) A preliminary cleansing with hot running water, soft soap, sterile nail-brush, nail-scraper, and scissors is carried out for five minutes. Then a fresh nail-brush is taken, and for a second period of five minutes the hands and arms are scrubbed with the soap spirit. This being completed, some sterile water is poured over the hands by a nurse, and cultures are taken from under the nails and nail-folds of each hand and two tubes inoculated. Then the surgeon with a foot-lever raises the lids of various drums and arrays himself in (1) a sterilised mantle reaching to the feet; (2) a cap; (3) merino sleeves, which extend upward from the wrist to over the ends of the mantle sleeves; (4) a mask, which is fixed on by an attendant; (5) cotton gloves."

The Monetary Cost of Consumption.

It is calculated that we spend in the United Kingdom upwards of a million sterling every year, through the poor-rates alone, on the victims of pulmonary tuberculosis. Moreover, of the 42,000 who die annually of this disease, the majority are between twenty and forty years of age, that is to say, they are lost to society just when they are in a position to make good the cost of their maintenance and education. The mere loss in wage-earning power is estimated at from ten to twelve millions annually. It follows that any means, however costly to begin with, which will have for effect to materially reduce this prodigious waste of life and working energy, ought, in the end, to prove a remunerative outlay to the community.

Hirsute Surgeons.

A movement is on foot, especially in Germany, to compel surgeons to abstain from wearing moustaches and beards, on the ground that these appendages are capable of carrying pathogenic microbes into the operating theatre, thus frustrating the endeavour to render all operations aseptic. To be logical, an edict

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(*a*) *Edinburgh Medical Journal*, September.

ought to be passed condemning them to shave the scalp as well, since their flowing locks are fully as open to objection as the beard. From this point of view baldness, it is suggested, constitutes a special qualification for surgical practice as well as an outward and visible manifestation of extreme cerebral activity, though we are prepared to challenge the assumption that baldness is necessarily the consequence or the indication of a high standard of intellectual attainments.

Medicine at the British Association.

Some very technical papers were read at the recent meeting of the British Association at Belfast. Among them was one by Professor Schäfer, F.R.S., on the diuretic action of pituitary extracts. There is reason to suspect that this curious little body possesses physiological properties of considerable activity, and it is quite possible that in the near future researches in this direction may open up an era in therapeutics as remarkable as that inaugurated by the introduction of preparations of the thyroid gland, the pharmacodynamics whereof were as ill-understood twenty years ago as those of the pituitary body are at present. Dr. John Turner brought forward some interesting results of recent researches on the intimate structure of the grey matter of the cortex. He showed that the pyramidal cells of the cortex are surrounded by a beaded network, the existence whereof had not been previously noted in the human organism, and he also showed specimens illustrating the connecting up of the nerve-cells by an intercellular plexus of nerve fibrils. The latter, however does not strike one as altogether novel. Professor Halliburton contributed an interesting paper on the regeneration of nerves, which tended to prove that repair of nerves takes place from the centre towards the periphery and not "from end to end."

Religion and Medicine.

It is always profitable to note a cultured layman's estimate of the modern practitioner of medicine. Mr. J. Brierley, in his recently-published volume of essays, "Ourselves and the Universe," ably expresses the view of many a thoughtful man as to the medical vocation. He shows that the feeling has grown upon men that this calling to the art of healing, demanding as it does the constant exercise at once of knowledge and of sympathy, and which also presents the most fascinating problems for the intellect, and the most imperious claims upon the heart, and whose aim is the furtherance of life and the defeat of death is emphatically a calling for noble souls, and, as he indicates, noble souls in abundance have flocked into it. "To-day the *personnel*, the standing, and the achievements of the medical profession represent one of the most valuable assets of civilisation." But the essayist does not stop with his praise. He contends that medical science is ultimately a branch of spiritual science, and seeks to show that bodily healing requires a knowledge of psychic as well as of physical conditions; and that, finally, the medical ministry to a diseased and broken humanity can never be adequate unless carried on as a mediation of the eternal goodness and love. It is certain that the old saying, *tres medici duo athei*, if ever it presented a degree of truth, can no longer hold, and doubtless many will find much that will profit them in this latest contribution to the much-discussed subject of the relation of religion and medicine.

Gas Leakage and Ill-Health.

With shortening days and need for illumination during the dark days and long nights of winter it is well that householders and all who employ gas in their houses should previously investigate the pipes and burners under their control. It is generally recognised that gas leakage may prove a serious danger in bringing about fires and explosions, and causing asphyxiation, but it is not so well recognised that a persistent fouling of the atmosphere by the slight escape of gas may be a fruitful cause of anæmia and serious debility. Many servants in kitchens where gas-cooking is in vogue, girls in restaurants where water and eatables are kept hot by constantly burning gas, suffer from various ills dependent on blood-poisoning, and much of the anæmia so prevalent among young females of this class is undoubtedly due in part to gas leakage.

Native Arrow Poison.

Among other interesting results of the sojourn of the Cambridge Anthropological expedition at Sarawak as the guests of Dr. Charles Hose, we have obtained a careful and trustworthy description of the vegetable poison used by the natives of the Baram district for poisoning their arrow-points. The *ipoh* is used by all up-country natives as a generic name for arrow-poison. Its application is very widely spread throughout Malaysia. The composition is not, however, constant throughout. More than one species of *strychnos* and antiaris appear to be used in different localities; sometimes a mixture. Among the Kenijahs of the Baram district, however, it appears that the sole source of the arrow-poison is the famous upas tree—*Antiaris toxicaria*—of romantically poetical, and approximately mythological, reputation. The poison is made by inspissating the juice, and has been found to owe its activity to the presence of a nitrogen-free glucoside, which acts on the cardiac muscle and on the central nervous system. We are promised a future communication from Dr. Seligmann, giving the results of his investigations on its physiological action. The *ipoh* is obtained by scoring the bark of the upas tree in oblique grooves, whose lower ends pass into a single vertical (larger) one; while at the lower end of the latter is placed an obliquely-pointed bamboo tube, to receive the trickling sap. Rolled in palm-leaf, and inspissated by artificial heat, this *ipoh* appears to retain its poisonous powers for years. The arrows, or *darts*, as they are more appropriately called, are made of strips of palm wood, about 20 to 30 cm. long. They are carefully rounded—with a diameter of about 3 mm. Each is provided with a butt of the pith of the sago palm, in the shape of a truncated cone whose base accurately fits the bore of the blow-pipe from which the dart is projected. The blow-pipe itself is from seven to eight feet in length. The natives aim well at a range of twenty yards, and at that distance the poisoned darts penetrated the fairly hard wood of a target to a depth of one-third of an inch.

The Gold Treatment of Tuberculosis.

The use of gold, that approximately universal panacea for the relief of the physical and mental ills which mar so many of the enjoyments of human life, has recently been requisitioned and most favourably reported on as a local auxiliary in defence against an invasion of bacillus tuberculosus. M. G. Bué, in a recent number of *La Semaine Médicale*, states that the general antiseptic powers of chloride of gold are equal to those of the iodine compounds; and that in topical applications it displays a special predilection for the habitat of the great enemy of mankind, the microbe of tubercle. From alcoholic dipsomania to suppurative adenopathy there opens a wide and yawning gulf; yet the magical therapeusis of the precious metal is held to be able to bridge it over. When "the highly experienced and famous chymist, John Rudolph Glauber," prepared his solution of "green Lyon, or wonderful Golden Salt," he announced to the world that "this Golden Liquor being drank, strengtheneth and confirmeth the whole humidum radicale, Stomach, Brain, and all the inward parts of the body, beyond all other medicines which I have hitherto known. Also it expelleth Melancholy, and all anxieties of Mind, taketh away Palpitations of the Heart, openeth obstructions of the internal vessels; it healeth the hurts of the inward parts, as Liver, Lungs, &c., and cureth all inward exulcerations; it cureth Gravel and Stone, whether in the Reins or Bladder; it keepeth the Body soluble; expelleth Wind, with the pains of the Cholick; preserveth the blood from corruption; cureth the Leprosie, Scabs, and Fevers of all sorts; in process of time it taketh away the Gout; to the insulting Apoplexy and Epilepsie it affordeth present cure; it cleanseth the Blood infected by the Scurvy, Plague, and other contagious Diseases; it preserveth and freeth from all internal Ulcers; defendeth the Lungs, Liver, and other parts; and removeth Exulcerations already arisen, and takes them away radically. It so tingeth all the inward parts of a Man with its Balsamic Virtue, that not being easily obnoxious to Diseases, they enjoy a sound and long life. Outwardly used, it healeth all fresh wounds, no less than old and open Ulcers, without any Ointments or Plasters; for in curing Ulcers of this sort, there is nothing in Animals, Vegetables, or Minerals, which answereth to this in Virtue; as also inwardly it cureth Ruptures." This comprehensive statement has left little room to subsequent observers and experimentalists for the discovery of new items of virtue in aural therapeusis. M. Bué uses a solution containing one gramme each of chloride of gold and chloride of sodium in fifty grammes of distilled water. Aspiration and evacuation of suppurating glands and tuberculous osseous tissue are followed by the injection of one c c. of the gold solution two or three times a week. The opening made by the needle is then sealed with cotton dipped in collodion. Four to twelve injections have caused the subsidence of the tuberculous gland in every case. No untoward after-effects have ever been noticed. As a topical application in tuberculous laryngitis, the gold solution has, however, given less encouraging results.

Latent Pneumonia.

In a certain proportion of deaths occurring with comparative suddenness, with little or no warning of the impending catastrophe, one is surprised, at the post-mortem examination, to discover extensive pneumonic consolidation, the existence whereof had not been even suspected. These cases fall into the category of "latent pneumonia," a variety of the disease which is practically confined to alcoholic subjects. Experience has shown that consolidation of one lung almost in its entirety is not incompatible with the patient's having led an active life well nigh to the moment of death. It occurs with most frequency during the bleak winter months, in adults over forty years of age, and most frequently in males. The possibility of sudden death being due to this cause should never be lost sight of in elderly alcoholic subjects, but, on the other hand, the presence of a certain area of pneumonia consolidation does not exclude the possibility of death being precipitated by other causes such as violence.

A "Pupil" Midwife.

A curious condition of affairs was revealed in a London Coroner's court last week in the course of an inquiry into the death of an infant eight days old. From the evidence it appeared the child was jaundiced from two days after birth, and became "yellow as a sovereign." The mother was attended during her confinement by a "pupil midwife" of the City of London Lying-in Hospital, but, in spite of the illness of the infant, no medical man was called in. A post-mortem examination of the body showed rupture of the spleen. Here we have the unqualified midwife with a vengeance, and the irony of the position is a thousand times multiplied by the fact that this culpable or reckless ignorance was paraded under the title of a medical charity. It appears that "pupils" are supposed to call in a medical man in case of illness, but the discipline of the institution must be somewhat lax if it permits a raw "pupil" to use her own discretion as to what constitutes serious illness. It would be interesting if one could trace the origin of the ruptured spleen. The facts of the case, as disclosed to the jury, did not warrant any conclusion as to the cause of the injury. It has long been evident that our lying-in hospital system requires a thorough overhaul.

Important Admiralty Concession to Navy Medical Officers.

We are officially informed by the Director General of the Navy Medical Department, that, in future, the fees (not exceeding £25) of the naval medical officers who undergo a three-months' course of study at metropolitan hospitals will be paid by the Admiralty, in addition to travelling expenses, with lodging and provision allowances according to scale.

PERSONAL.

Dr. Andrew Balfour, of Edinburgh, has been appointed Bacteriologist and Expert Adviser to the Governor-General of the Soudan Provinces at Khartoum.

Major Heuston, C.M.G., R.A.M.C., has been appointed Medical Officer to the Royal Hospital, Kilmainham, and the Royal Hibernian Military School, Phœnix Park.

Sir T. Thistleton-Dyer, K.C.M.G., F.R.S., has been elected the first president of the recently-formed "Therapeutical Society," which will meet on the premises of the Society of Apothecaries at dates hereafter to be fixed.

The Royal Humane Society have awarded to Dr. Cuthbert Eccles, Dispensary Medical Officer of Delgany, Greystones, County Wicklow, the society's testimonial for saving Mr. Lumley from drowning while bathing in the sea at Greystones on June 26th.

Dr. T. H. Milroy, Assistant to the Professor of Physiology at Edinburgh University, has been appointed to the Chair of Physiology at the Queen's College, Belfast, rendered vacant by the appointment of Prof. W. H. Thompson to the same chair in Trinity College, Dublin.

Mr. Rushton Parker, F.R.C.S., Professor of Surgery in University College, Liverpool, will occupy the chair at the annual dinner of past and present students in the Faculty of Medicine, University College, London, which is to take place at the Hotel Cecil on the 1st prox.

Mr. William Miller, of Montreal, Canada, has offered a donation of £500 to the Derry Infirmary to build and equip an operating theatre in the new wing of the institution. Mr. Miller desires that the theatre be regarded as a memorial to his deceased father, who so long and honourably filled the office of surgeon to the infirmary.

Dr. R. C. Brown, the *premier* practitioner of Preston, has received the distinguished honour of being proposed by the Earl of Derby, Guild Mayor of Preston, for admission as an in-burgess of that ancient borough. Dr. Brown's benefactions to local medical charities are well known. The Countess of Derby has recently opened one of the finest operating theatres in the country, which Dr. Brown has built at his own expense for the Preston Infirmary, and to the same institution he has also given an admirable organ. Dr. Brown sets a wise example in personally superintending the bestowal of his numerous benefactions.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

SCOTLAND.

[From our own Correspondent.]

NEW EDINBURGH ASYLUM SCHEME.

This vexed question was discussed at a recent conference between the General Board of Lunacy and the District Lunacy Board, with special reference to a report thereon by Mr. G. T. Hine, architect, London, who was in attendance. The prefatory remarks were made by the Master of Polwarth, who presided, and in referring to the state of matters which prevailed, and which required their very serious attention, he advised the District Lunacy Board to do something as rapidly as possible. His remarks were discreet and full of common sense, and in concluding, he said, "Cut out the expensive matters of detail, get to work at once, and make good, sound, healthy provision for those whom they had to provide for." Surely this does not leave much to be desired, and the Board could not have got more fitting or better advice. At Morningside Asylum there are forty patients sleeping on "shakedowns," and this cannot but be regarded as very unsatisfactory. Then the District Board have over 100 patients boarded in other asylums, and it was very fortunate for them this accommodation was available, otherwise they would have been in a sorry plight.

A meeting of the District Lunacy Board was afterwards constituted, and after a lengthy discussion it was ultimately decided to act upon the recommendations of Mr. Hine and the General Board of Lunacy, and to adhere to stone construction for all the buildings, but modified as regards details, to simplify the interior fittings of the buildings, to reduce the style of finishing in all legitimate ways, to commence building operations as early as possible by erecting an administrative block and infirmaries first. It was remitted to the architect (Mr. Blane) to consult with Mr. Hine and amend the plans, specifications, and schedules in accordance with their views.

The ratepayers of Edinburgh must feel relieved that all the peevish disputes over this scheme have at last been apparently closed, and that there seems a prospect of building operations being commenced soon. For some time an outlay of £600,000 for an asylum, eminently splendid in the extreme, for pauper lunatics has been suspended over their heads, like the sword of Damocles by a single thread, threatening to fall upon them at any moment, and it must be a comforting unction to their souls that the expenditure has been cut down to just one-half that amount. The grandiose ideas of the Board have received a rude shock, the cost per bed having been reduced to £300, exclusive of cost of estate, railway, and water supply, equal to about £150 more per head. We expect the asylum, when finished, will approximately cost about half a million pounds, and as it is urgently required the work should be begun at once.

BELFAST.

[From our own Correspondent.]

The Union Workhouse Scandal.—A meeting of the Board of Guardians was held on September 16th, at which, after several hours' lively discussion, the guardians decided, by a majority of 32 to 1, to bury in oblivion their extravagance in the supply of medicines and medical appliances and the Local Government Board inspector's very outspoken report thereon. The question at issue at the last meeting was the continuance or otherwise of Messrs. John Clarke and Co. as contractors. The Local Government Board inspector said in his report:—"In connection with this matter the action of the medicine contractors, Messrs. Clarke and Co., in deliberately entering into a separate contract and charging special prices for the articles already provided for in the formal contract with the guardians, is open to so unfavourable an interpretation that the Board consider the guardians should, after due notice, convene a special meeting, with a view to determining whether this firm should any longer be entrusted with the contract for supplying medicines to the workhouse. It is hardly credible that large contractors like Messrs. Clarke and Co., who supply drugs to a great number of unions in Ireland, could have acted in ignorance of the terms of their bond, and no adequate explanation was offered by them at the inquiry as to how they came to make these excessive charges." After this "plain talk" Messrs. Clarke and Co. wrote a letter to the Guardians, withdrew it, and substituted another, now published. A more futile document as an "explanation" it would be hard to imagine; it just amounts to this, that they never knew the meaning of the terms in their bond. However, the Guardians charitably swallowed it all, and agreed that the Local Government Board inspector had made a mistake! The minority of one hinted that explanations had been given in private, and that "a lot of underhand influence was at work." But in spite of his protests Messrs. Clarke and Co. are to continue to supply the medicines, and we, poor ratepayers, will continue to pay the bills.

Chair of Physiology in Queen's College, Belfast.—It was announced on the 20th that Dr. T. H. Milroy has been appointed to the Chair of Physiology in Queen's College, rendered vacant by Professor W. H. Thompson's resignation. Professor Milroy had a distinguished career at Edinburgh, then studied at Marburg and Berlin, and for some time has been assistant to Professor Schäfer, at Edinburgh. He attended the Belfast meeting of the British Association, and made a most favourable impression on those who met him.

British Association for the Advancement of Science.—The meeting of the British Association in Belfast opened on Wednesday, Sept. 10th, with the address of the President, Professor Dewar, followed by the addresses of the presidents of the various sections on Thursday. The meeting was hardly so large as the last one held in Belfast in 1878, but otherwise proved a very successful one. It is to be regretted that so few local medical men have taken part in the active work of the Association, as the number of medical men among the visitors is considerable. In Section I.—Physiology—which is the section appealing most strongly to us, papers have been read by Professor Halliburton (president of the section), Professors Schäfer, Page May, Gotch and Symington, and Drs. Edridge Green, Osborne, and Cecil Shaw. In the Section of Anthropology much interest attached to the exhibition by Professor Cunningham, of the skeleton of Cornelius Magrath, the Irish giant. The meetings of the British Association concluded on Wednesday, 17th, with the usual general meeting and votes of thanks.

The smoking concert given by the Ulster Medical Society on Monday, the 15th, was among the most successful of the entertainments. About 230 members and guests were present, and an excellent programme of music was provided. The programme, illustrated with sketches of prominent members of the British Association and their doings, was the source of much amusement.

The Health of Belfast.—The report of the Medical Superintendent Officer of Health for the City of Belfast for the year 1901 has just been issued. It is an interesting document, both for what it includes and for what it omits; both points can be best brought out by a comparison with an English report, and we have on our table the Liverpool report of the same year—a city with less than double the population of Belfast. The Liverpool report contains 227 pages, six charts, and three maps; the Belfast report contains forty-five pages, two charts, and no maps. The Liverpool report contains an index covering six pages, the Belfast report contains no index or table of contents of any description whatever, and if one wants to find what is in it one has to go right through it. Of the forty-five pages in the Belfast report six are taken up with a sort of geographical description of the districts into which the town is divided, and seven with a detailed account of the weather during each month of 1901, interspersed with remarks on the more prevalent diseases: and finally seven pages are filled with a list of the streets in which typhoid occurred, with the number of cases in each street—which, of course, ought to have been shown on a map. These three items, then, supply twenty pages of padding, leaving twenty-five pages for matters of importance. These pages include eighteen tables, of which Table I., showing the number of infectious diseases reported during the last ten years, is one of the most interesting. From this it appears that there were 2,530 cases of typhoid reported in 1901, the highest except in 1898 and 1897. If the 1,351 cases of simple continued fever are included, as they probably should be, 1901 is worse than any year except 1898. Typhus cases numbered fifteen, and small-pox five, while diphtheria and membranous croup reached the serious total of 433. The death rate is given as 22·4, the average for the previous nine years being 23·5. Under the head of "Typhoid," we are told "During the year Dr. J. Lorrain Smith, Queen's College, examined the blood of the patients by Widal's test in eighty-eight cases, and found that fifty-five gave positive and thirty-three negative reaction." This is the only mention we can find of Professor Lorrain Smith's valuable work: his examination in diphtheria cases, as also his examinations of water, sewage, &c., are absolutely ignored. In the Liverpool report twenty pages are devoted to the analytical and bacteriological examinations of specimens of food, milk, &c., but we are left entirely in the dark as to whether such examinations are made here. Similarly we are in the dark regarding the destruction of unsound meat, fish, vegetables, &c., while the Liverpool report gives full particulars in five pages. We have a refuse destructor in Belfast, but it is not even mentioned, and we depend for information concerning it on the sinister rumours as to its being an expensive failure. But it is not only things we are ashamed of that are suppressed, for our excellent ambulance system, of which we have some reason to be proud, is not mentioned either. To conclude, we can only say that this report, emanating from a large and prosperous city like Belfast, is a disgrace to all connected with the Health Department of the city, and we sincerely hope such a poor production will never again be seen here.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

"THE SCIENTIFIC ASPECTS OF THE BACON-SHAKESPEARE CONTROVERSY."

To the Editor of The Medical Press and Circular.

Sir,—In your review of Judge Webb's book under this heading you state that Bacon "was not a man of science at all, and that his scraps of scientific knowledge were derived from sources accessible to every student of that date." This, surely, is an extraordinary statement to make when it is a matter of common knowledge, as Professor Fowler says, that in the particular sciences Bacon threw out many suggestions of rare sagacity, and anticipated more recent discoveries, which Professor Knott ignores. Such were his speculations on colour, his anticipation of the recent theory of heat, his experiment on the compressibility of water, and his wonderful appreciation of the combined unity and variety in nature. To these instances may be added his sagacious and fertile suggestion of a closer union between formal and physical astronomy as well as of the necessity of combining the explanations of celestial and terrestrial phenomena; the remarkable passage on attraction, and the ingenious experiment in connection with it; the brilliant conjecture in "Novum Organum" that the actual state of the starry sky precedes by an interval of time that which is apparent to us, or, in other words, that light requires time for its transmission; the implied criticism of the ordinary doctrine of species contained in a passage on Realism in "Novum Organum" and, lastly, the attempt made in the "Historia Ventorum" to consider the direction of the winds in connection with temperature and aqueous phenomena, on which Humboldt highly compliments him as having thereby laid the foundations of a theory of the currents of the atmosphere. "Bacon the scientist," as you sarcastically call him, performed all these feats, and his death was caused through his passion for science, as he died from the effects of a cold contracted by his leaving his coach to collect snow with which he meant to stuff a fowl in order to observe the effect of cold on the preservation of its flesh, thus anticipating "frozen meat" by a few hundred years. "Bacon the scientist" also wrote, I believe, the "New Atlantis," which suggested the foundation and programme of the Royal Society, as well as of several scientific societies abroad. But these scientific societies, of course, according to Professor Knott, have nothing to do with science. And Bacon also knew nothing about science when he succeeded in laying the foundations of a science for the interpretation of nature which furnish the ground-plan on which all subsequent workers in this department of knowledge have built. So "Bacon was not a man of science at all."

It would be interesting to know where and when Bacon "contemptuously rejected" the views of his medical adviser, William Harvey, regarding the circulation of the blood, and it would be equally interesting to learn where William Shakespeare obtained the scientific knowledge which enabled him to anticipate Harvey's discovery—years before its announcement—when he writes:—

"The ruddy drops that visit my sad heart."
(*Julius Cæsar.*)

"Oh, heavens! why does my blood thus master to my
heart." (*Measure for Measure*)

"I send it through the veins of your blood,
Even to the court, the heart." (*Coriolanus.*)

Voltaire maintained that Bacon forestalled Newton on the subject of gravitation. In a letter to King James, Bacon wrote, "The water and like bodies do fall towards the centre of the earth," and "iron trembles under adamant." Curiously enough, at the same time, the same discovery was made by Shakespeare in the vow of Troilus, who says he would be true to Cressida "as iron to adamant, as earth to the centre," and that Cressida's love

"Is as the very centre of the earth,
Drawing all things to it."

You say that Bacon's "scraps of scientific knowledge were derived from sources accessible to every student of that date." Can you give me the source of the following scrap, taken from Bacon's "Description of the Intellectual Globe?" (1611)?

"I am the more induced to set down the History of the Arts as a species of Natural History, because an opinion has been long prevalent that Art is something different from Nature, and things artificial from things natural. Whereas men ought, on the contrary, to be surely persuaded of this—that the artificial does not differ from the natural in form or essence, but only in the efficient; . . . it is Nature which governs everything. . . . All I mean is that Nature, like Proteus, is forced by Art to do that which, without Art, would not be done." In 1611, then, Bacon declared that "Art is Nature." In the very same year "A Winter's Tale" is written, and in this play we find the following:—

"Yet Nature is made better by no mean.
But Nature makes that mean: so over that Art
Which you say adds to Nature, is an Art
That Nature makes . . . .
This is an art
Which does mend Nature, change it rather, but
The Art itself is Nature."

Can a third earlier or contemporary parallelism be found enunciating the axiom that "Art is Nature"?

Bacon received his scientific and philosophical knowledge from study. Shakespeare obtained his from "intuition," which, according to Cowden Clarke, "taught him many secrets of Nature as yet unpromulgated by science to the world, as well as many of those known only to adepts in their several branches of science"; from "the study of the "infinite book of Nature," according to Halliwell-Phillipps, and from "heaven-sent inspiration," according to Theodore Martin. Very likely!

I am, Sir, yours truly,
GEORGE STRONACH.

Edinburgh, September 20th, 1902.

"THE NOMENCLATURE OF SURGICAL OPERATIONS FOR UTERINE TUMOURS."

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I read with pleasure Dr. Giles' gentlemanly reply to my suggestions, and I have waited some little time in order to give others the chance to say something about the subject, but I am much afraid that the nomenclature of surgical operations is anything but a matter of interest to the bulk of practitioners. I need not say that I consider this a very great calamity indeed, since it is a pretty substantial evidence of the state of knowledge, or rather lack of knowledge, of those languages which constitute the basis of our professional names in both medicine and surgery. "Little Latin and less Greek." As a matter of fact, long-nebbed names as a rule are a stumbling-block and an abomination to the ordinary medical practitioner, and this has always been the case.

The names that survive and come into general use are the simplest, and preferably English adapted words, both for diseases and operations. On this consideration, then, I think, Dr. Giles misses the point. I can agree with him in the accuracy of his use of the words he proposes now for operations, and if I had my way I would simplify and epitomise a great deal of our work by using such words. But I can see perfectly well that in the present state of education it would be quite impossible to introduce such words generally.

I certainly would insist on a much greater knowledge of the Latin and Greek medical writers in their own languages, but it is plain there is not the least possibility of carrying that out at the present time.

Therefore, what I did propose was, that only the simplest words should be used for indicating operations, and that no combination of words should be used implying or containing a description of the operation done, nor of the disease for which it was done. This brings me again to the statement that if this plan were adopted in gynæcological surgery it (gynæcology) would then become spontaneously a branch of ordinary surgery, and the descriptions of the operation and of the disease would fall entirely into their own places.

For instance, in an operation for club-foot, no combination of words is used to indicate both operation and the condition of the foot. The operation will be called "Tenotomy," while the disease may be "Talipes equino varus"; or, going from the foot to the head, the operation on the skull would be called "Trephing," quite independently of what the disease may be.

I need not elaborate this; I merely wish to emphasise that it would be better in the interests of surgery, and especially of gynæcological surgery, first, to keep the names simple; second, not to mix up the nomenclature of operation with that of disease.

I am, Sir, yours truly,
J. STUART NAIRNE.

268, Renfrew Street, Glasgow,
September 15th, 1902.

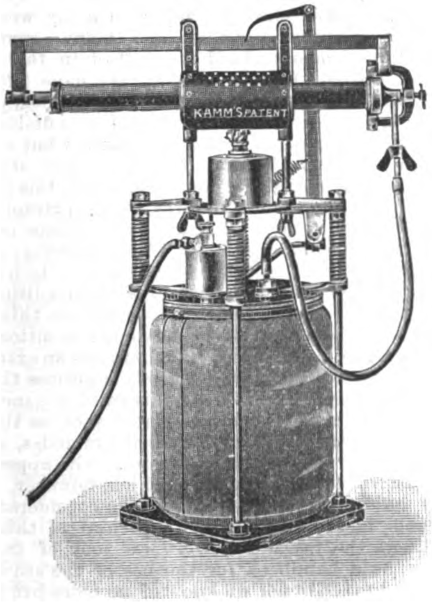
Royal Army Medical Corps.

THE Secretary of State for War has allowed that candidates for commissions in the Royal Army Medical Corps who are over the regulated limit of age at the date of the competitive examination shall be permitted to deduct from their actual age any period of service in the field after October 1st, 1899, that they would be allowed to reckon towards retired pay and gratuity if such deduction will bring them within the age limit.

New Inventions.

OXYGEN AS A THERAPEUTIC AGENT.

Oxygen has been clearly demonstrated to be a valuable therapeutic agent in the treatment of various ailments. Its service in expediting the healing of ulcers has been fully demonstrated; many cases of serious anæmia have benefited by its administration, but it is particularly in acute affections involving the respiratory apparatus that it has proved most distinctly advantageous. Not a few cases of pneumonia have undoubtedly been saved through its instrumentality, and in many instances of laryngeal involvement, chronic bronchitis and emphysema, and certain other pulmonary lesions, oxygen has won its position as a trustworthy agent. In towns but little difficulty is experienced in obtaining an adequate supply of oxygen in cylinders, but in country districts and isolated parts this is not the case For such the new Medical Oxygen Generator invented by Messrs. Kamm and Co. should prove of great service. We have carefully examined the new apparatus and find it to be a simple, convenient and trustworthy means of generating oxygen in quantities sufficient to meet the needs of medical cases.



Literature.

MASSAGE IN RECENT FRACTURES. (a).

The prolonged stiffness of limbs and the immobility of joints after fractures have always been a great source of trouble to the patient and considerable anxiety to the surgeon. Any treatment therefore which is safe, easily applied, and that will lessen the prolonged splinting which is the invariable rule in fractures of the limbs, ought to be hailed as a great boon in this department of surgery.

The little work before us, which we have carefully perused with much pleasure and profit, consists of a course of Four Lectures, including an introduction and an appendix, delivered by the author at St. George's Hospital, and which were subsequently published in the *Lancet*, and, as a second edition, now appears with further illustrations and additions.

The use of massage, and early movements in recent fractures, was originally introduced by Lucas Championière, a well-known French surgeon, and the author has been the strong advocate of the method in this country. In safe and skilled hands, we can easily understand how useful such a treatment might be in an uncomplicated case, to prevent matting of the tissues, wasting of the unused muscles and stiffness of the joints, above and below the fracture.

But in cases where the treatment is undertaken by a tyro or "prentice hand" we would be afraid to anticipate the disastrous results which might possibly follow.

The author shortly describes his treatment as follows when he says: "The method comprises three stages. 1. Gentle rubbing in an upward direction over the fracture with a view to soothing the patient, the relief of muscular spasm and rapid absorption of extravasated blood. 2. Passive movements of the joints above and below the fracture (thus effecting internal massage) by which all matting of the soft parts at the seat of the fracture and above the joints is prevented. 3. The development of wasted muscles by the ordinary massage processes" We commend the perusal of this book to those interested in the subject.

EXAMINATION OF THE URINE. (a)

As the author indicates in his preface, this volume naturally falls into two parts. Part I. describes the various chemical and microscopical methods employed in the examination of the urine, while Part II. gives a short summary of the etiology and prominent symptoms of several diseases, and a more detailed account of the leading changes in the urine associated with them. The object of the writer is first to instruct the reader in the methods of urinary examination and then to demonstrate to him how to apply his knowledge as an aid to accurate diagnosis.

We regret the replacement of the term chronic parenchymatous nephritis by subacute glomerular nephritis. Histologically and chronologically, in our opinion, the modern phrase is inaccurate, and even Dr. Ogden, though he holds that the essential lesions are in the glomeruli, admits that there is extensive degeneration, necrosis, and desquamation of the tubular epithelium.

In an interesting description of the elimination of sulphates, and the diseases which disturb the normal proportion of the alkaline and ethereal sulphates, we notice no reference to pernicious anæmia. Other writers attach considerable importance to the marked disproportion of the ethereal sulphates in this obscure affection, as a point in favour of the hypothesis that the initial lesion is intestinal. There is an excellent chapter on the occurrence of carbohydrates in the urine, but most readers will think it rather contradictory to be told in one place that glucose is extracted from its solutions by animal charcoal, and subsequently to be directed to free urine from any turbidity by filtration through animal charcoal before using the saccharometer. All through the book, but especially in this chapter, we feel it a great drawback that only empirical formulæ are given in expressing a chemical reaction. Structural formulæ are more easily understood and remembered by a student with a moderate knowledge of chemistry.

In describing the tests for acetone we notice no reference to an important reaction to which Professor Reynolds some time ago drew attention. He has shown that acetone is able to dissolve the yellow precipitate of mercuric hydrate produced by the intern action of corrosive sublimate and caustic soda. We can fully indorse the author's opinion of the value of Gerhardt's reaction in diabetic urine as a danger signal that coma is threatening, but no mention is made of the possibility that hydroxybutyric acid is the antecedent of aceto-acetic acid.

There are some clerical errors such as "Widal" for "Weidel," "lactic" for "acetic," "urine" for "urea," which can be easily corrected if a subsequent edition be demanded.

(a) "Lectures on the Use of Massage and Early Passive Movements in Recent Fractures, together with the Treatment of Internal Derangement of Knee-joint and the Management of Stiff Joints." By Sir William H. Bennett. K.C.V.O., F.R.C.S., Senior Surgeon to St. George's Hospital. Second Edition. Seventeen Illustrations. Pp. 115. Price 6s. London: Longmans, Green and Co. 1902.

(a) "Clinical Examination of the Urine and Urinary Diagnosis." By J. Bergen Ogden, M.D. Philadelphia: W. B. Saunders and Company. 1900.

In conclusion, our opinion of the value of this book may be briefly expressed by stating that we have not merely dipped into it here and there. We have read it from cover to cover. The type is good, the illustrations are fair, and the clerical errors are not numerous. Taking the book all round we can commend it as a trustworthy up-to-date work on urinary chemistry and diagnosis.

HANDBOOK OF OBSTETRIC NURSING. (*a*)

This handbook for midwives has now reached the fourth edition; in it special attention has been given to the management of labour, and particularly to that of the third stage. Recognising the immense importance of antiseptics in midwifery, the authors have drawn up rules applicable to the antiseptic management of labour both in hospital and private practice. Undoubtedly one of the most essential things for an obstetric nurse is to know the meaning and application of antiseptics. In the second chapter the meaning of blood poisoning in puerperal fever is made clear, and the striking fact is instanced that since the introduction of antiseptics into the large maternity hospitals, the mortality from childbed fever has fallen from 15 per cent. to almost none at all. Antiseptics therefore have almost entirely annihilated puerperal fever.

The list of antiseptic solutions is up-to-date, but the value of formalin as an antiseptic is not recognised. The rules for sterilisation of the hands are excellent. We do not agree with the advice in the management of the second stage of labour, when, on page 119, examinations are recommended to be made "every half-hour" to ascertain if progress is being made. We consider this distinctly meddlesome and unnecessary; each fresh examination undoubtedly adds a fresh risk of infection. More importance should have been attached to abdominal palpation as a means of recognising the presentation and for estimating the progress of labour. What is the advantage of Fig. 25—a malacostron pelvis—to midwives? We make these criticisms in no captious spirit; we congratulate the authors on their useful handbook. It is one of the best for the instruction of midwives. Much scientific detail is omitted; the facts are both practical and essential.

ROSS ON MALARIAL FEVER. (*b*)

The subject-matter dealt with by the author's pen should require no other pen to recommend it.

The work is intended for the use of travellers, sportsmen, soldiers, and residents in malarious places, and so the "fairy-tale of science" which it contains is written in language of every-day life. That it has passed into a ninth edition shows that it has been appreciated by those for whom it was intended.

Having discussed the etiology of the disease, which forms one of the romances of medicine, the author says: "All these are not theories or fancies, but hard facts, won by science at the cost of immense labours carried out by many scientific men during many years." This but feebly expresses the truth, and it is a wonderful tribute to medical science that these hard facts, won at the cost of immense labours during so many years, are freely given away to all and sundry who choose to profit by them.

Within the short compass of sixty-eight pages the whole subject is considered in a brief but thorough manner, so that the causes of the disease being fully understood, the reader may deal with its prevention intelligently, and in emergency even treat it when it occurs in the absence of medical aid. No traveller to malarious districts should start on his journey without having read this book, and thus armed himself with the means of resisting the free scourge of malaria.

The book is issued under the ægis of the Liverpool School of Tropical Medicine, where Dr. Ronald Ross is lecturer and the acknowledged authority on the subject. The type and get-up of the book are all that could be desired, and its price places it within the reach of even a humble migrant.

WALKER'S INTRODUCTION TO DERMATOLOGY. (*a*)

This is the second edition of a book for which we ventured to augur a successful career on its first appearance. It is larger than its predecessor, but is still kept carefully within a manageable compass. Many of the trifling lapses that somewhat marred the first edition have disappeared, and a higher standard of achievement has been reached. At the same time a few points may be criticised. In speaking of the Röntgen ray treatment Dr. Walker alludes simply to a lay worker in a London hospital. There are many competent medical practitioners who have worked in that direction; indeed, Dr. Walker need hardly have left Scotland for authorities. It is too much the tendency, however, for medical men to employ workers outside their own profession, not only in the Röntgen ray but in other branches of work. Nemesis follows in the shape of fresh hordes of irregular practitioners. In this edition, as in the first, the author adheres to his extraordinary classification by which he places pediculosis corporis among the hæmorrhages. He shows certain qualms of conscience by an apologetic introduction to his text. Lapse of time and the necessity of a third edition will probably enable him to review his position in this particular. Dr. Walker takes an advanced position with regard to "psoriasis," which he regards as an extremely dry form of seborrhœa, but he wisely describes the condition separately. The value of this edition is increased by the appearance of some new plates, such as those of the early and later stages of mycosis fungoides, and an excellent one of erythema induratum. The appearance is suggestive of syphilis, from which, however, it can usually be readily differentiated by a consideration of the whole facts of the case. A perusal of this book strengthens the favourable view we took of the first edition. As a handbook for the use of the student or the general practitioner we know of no more handy and accurate guide to an important subject. In future editions it is to be hoped that Dr. Walker will avoid the diffuse dissertations and undigested masses of information that are dear to several well-known writers on dermatology. He brings a wide practical experience to bear upon his subject, and it is somewhat curious to see so clear a writer classify pediculosis corporis among the hæmorrhages. It is with real pleasure we recommend this book to all who wish to have in their possession a concise and easy introduction to the study of diseases of the skin.

FORTHCOMING NEW BOOKS AND NEW EDITIONS.

Messrs. Bailliere, Tindall, and Cox have sent us the following list of new books and new editions to be published by them during the current month:—The fifth edition of Messrs. Rose and Carless's "Manual of Surgery"; the fourth edition of Professor Politzer's text-book of "Diseases of the Ear" (authorised English translation under the author's supervision); the fourth edition of Messrs. Cross and Cole's "Modern Microscopy"; the fourth edition of Dr. Murrell's "Forensic Medicine and Toxicology"; the fourth edition of Dr. Gubb's "Aids to Gynæcology"; the third edition of Dr. Macnaughton Jones's "Practical Points in Gynæcology"; and revised editions of "Aids to Sanitary Science" (by Dr. Allen and Dr. Farrar), of Fleming's "Text-book of Veterinary Surgery" (revised by Professor Macqueen) and of "The Veterinary

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(*a*) "Handbook of Obstetric Nursing." By Francis W. N. Haultain, M.D., F.R.C.P.Edin., and James Haig Ferguson, M.D. F.R.C.P.Edin. With Frontispiece and 87 Engravings Edinburgh and London: Young J. Pentland. 1902.

(*b*) "Malarial Fever: its Cause, Prevention, and Treatment." By Ronald Ross. Ninth Edition, revised and enlarged. 2s. 6d. Published for the University Press of Liverpool by Longmans, Green and Co. 1902.

(*a*) "An Introduction to Dermatology." Norman Walker, M.D., Assistant Skin Physician, Edinburgh University. Second Edition. John Wright and Co., Bristol. 1902. Price 9s. 6d. nett.

Pharmacopœia," by Dr. G. Gresswell. Also the following new works: "Errors of Refraction," by Mr. Ernest Clarke, F.R.C.S.; a monograph on "Pulmonary Consumption," by Dr. Arthur Latham (winner of the King's prize of £500); a monograph on "Anæsthetics," by Dr. Blumfeld; "Essays on Operative Surgery," by the late Sir Wm. Stokes; and "The Theory and Practice of Infant Feeding," by Dr. Chaplin.

Mr. H. K. Lewis sends us the following list of new works and new editions: "Cancer of the Uterus: a Clinical Monograph on its Diagnosis and Treatment," by A. H. N. Lewers. "Handbook of the Pathology of the Skin: being an Introduction to the Histology, Pathology, and Bacteriology of the Skin, with special reference to Technique," by J. M. H. MacLeod, Assistant in the Bacteriological Department, Charing Cross Hospital. A new (third) edition of "Diseases of the Skin: their Description, Pathology, Diagnosis, and Treatment," by H. Radcliffe-Crocker; the second edition of "Hygiene and Public Health," by L. C. Parkes and H. R. Kenwood; and a new edition of "Ophthalmic Practice," by Charles Higgens, revised with the assistance of A. W. Ormond, ophthalmic clinical assistant, Guy's Hospital.

Medical News.

Death under Chloroform.

A man, sixty-two years of age, died at the Wrexham Infirmary a few days since while chloroform was being administered for the purpose of an exploratory operation. "The usual examination" was made before commencing the administration of the drug, and "the usual treatment" was resorted to when the heart had ceased to beat, but no mention is made of the method of administration, nor of the quantity of chloroform used—the only points worth inquiring into in the event of a catastrophe.

Presentation to a Medical Man.

Dr. H. S. Morrison, medical officer of Aghadowey, has been presented with a purse of sovereigns and an illuminated address; and Mrs. Morrison received a service of silver plate. The presentation was given by the *employes* of the Aghadowey Creamery to Dr. H. S. Morrison, as president of the Aghadowey Creamery and chairman of its executive committee. We congratulate the doctor on this deserved recognition of his ability and usefulness in one of the most progressive districts in Ireland.

Malaria at Ismailia.

It is stated that the Chairman of the Liverpool School of Tropical Medicine has been requested to co-operate in a concerted effort to cope with the prevalence of malaria in Ismailia. Major Ross has consequently been instructed to commence operations against the mosquitoes during the present month.

Memorial to Professor Virchow.

A meeting was held at Berlin last week, under the presidency of Professor Waldeyer, to discuss a scheme for raising a memorial to perpetuate the life and work of the late Professor Virchow. The memorial will probably take the double form of a statue and a scholarship for original research.

Gynæcological Congress at Rome.

The Fourth Congress of Gynæcology was held at Rome last week, at which assisted a large number of members recruited from all parts of the world, although England appears to have been represented only by two gynæcologists of eminence.

Ecclesiastical Hygiene.

It is stated that a petition has been presented to the Pope asking that plenary indulgence shall be granted to all priests and monks who shall wash themselves daily, with an extra partial indulgence to those who shall have shaved regularly at least three times a week during a specified period. This is evidently aimed at certain Italian monks and seminarists who still cling to the "odour of sanctity," and among whom soap, the hair-brush, and the looking-glass are worldly luxuries excluded by rule. They exhibit, in fact, what Lord Palmerston once called the *esprit de corps*.

Small-pox in Barbadoes.

The outbreak of small-pox in Barbadoes continues to spread, and the attempt to isolate the victims of the disease has, on several occasions, led to riots. The type of the disease is very mild, and the proportion of fatal cases has been extraordinarily low.

A Public Vaccinator's Dilemma.

Dr. Jones, one of the Public Vaccinators for Southwark, sent in a bill for revaccinations including an item of £160 in respect of the *employes* of certain factories, many of whom did not reside in the district. This sum has been disallowed by the guardians on the ground that their authority was not obtained, but Dr. Jones claims that the necessary authority was given him by the Local Government Board.

A Nurse's Claim for Wrongful Dismissal.

An action was tried at the Barnstaple County Court a few days since in which a trained nurse claimed for wrongful dismissal. It seems that while in charge of a patient the plaintiff lost her purse, and as it could not be found she applied to a constable for advice. She was thereupon summarily discharged, and the judge held that this act could not be justified, and gave judgment for the plaintiff, observing that it was a gross case, and had it been in his power he would have awarded damages.

The R.C.S.E. Charter.

The claim of nine members of the Council of the Royal College of Surgeons of England to the franchise on the strength of the charter given to the College by Henry VIII. has been disallowed by the Revising Barrister, and notice of appeal has been given.

Royal Army Medical Corps.

An Army Order dated September 1st, just issued, contains a Royal Warrant relating to the medical officers of the Household troops. It sets forth that commissions as surgeon-lieutenants in the Household Cavalry shall be given, on the nomination of the titular colonels of the regiments, to persons approved by the Secretary of State. Lieutenants and captains of the R.A.M.C. attached to regiments of the Household Cavalry at the date of the Warrant may, on the nomination of the titular colonels of the regiment, be transferred thereto in the rank of surgeon-lieutenant and surgeon-captain respectively. A major or lieutenant-colonel of the R.A.M.C. may, on the nomination of the titular colonel of the regiment, be transferred from his corps into the rank of surgeon-major or surgeon-lieutenant colonel respectively in one of the regiments of Foot Guards.

Galway County Hospital.—The Nursing Question.

At the usual meeting of the Board of Management of the Galway County Hospital the nursing question was considered. Mr. Leonard, secretary to the hospital, brought under notice a draft copy of rules suggested by the medical staff at a meeting held on July 6th last. The salient feature of the scheme is the amalgamation, for the purposes of teaching, of the material of the fever hospital, the union hospital, and the county hospital. After a protracted discussion it was finally decided that a committee of five members of the board of management meet and confer with the medical staff as to some feasible scheme in reference to the proposed training school, and to report results to the Board in the first week of December.

Dublin Death-rate.

The deaths registered in the Dublin registration area for the week ending Saturday, September 13th, 1902, represent an annual rate of mortality of 19·5 in every 1,000 of the population. Diseases of the nervous system caused twelve deaths; of the respiratory system, fourteen deaths; and of the circulatory system, seventeen deaths. Sixty-two infants died during the week, of whom forty-eight were under twelve months old. Within the city the death rates of the following areas were as follows:—Blackhall Place, 29·6 a 1,000; South Earl Street, 21·8 a 1,000; Grand Canal Street, 23·9 a 1,000; and in the Cattle Street district, 30·5 a 1,000.

Notices to Correspondents, Short Letters, &c.

☞ **Correspondents** requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

Original Articles or **Letters** intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Hertford.—If the case be investigated with an unbiassed mind, it will probably be found to have originated in a slight misunderstanding. We strongly advise you against the proposed action.

Dr. G. H. Evans (San Francisco).—Letter to hand will be considered.

Nurse Armstrong.—We regret that we have not the necessary information to enable us to answer your question. We recommend you to apply to a nursing journal, such as *The Hospital*, or *Nursing Notes*, as they may possibly be able to tell you what you want to know.

A **correspondent** writes: I note that a pharmacy has recently been opened in the W.C. district, the proprietor of which rejoices in the name of Cofman, surely a peculiarly significant name for a retail chemist. A "Cofman's Remedy for Consumption" ought to be a success with the gogo public.

DEAR FAT.

A **subscriber**, in discussing the benefits to be derived from the Weir-Mitchell treatment in neurasthenia, relates the case of a young Colonial who underwent a six-weeks' course of the treatment in a well-known institution in London. When he left he found he had gained a little over three pounds in weight, and on dividing this into the sum he had paid for the treatment he found that it worked out at something like twenty-five shillings an ounce. Even Colonial fat, he thought, was dear at the price.

MYSTERIOUS DEATH OF A MEDICAL PASSENGER.

Dr. William Madde, a passenger on board the ss. *Madeirense*, now lying in Penarth Harbour, was found dead in his cabin a few days since, and it is surmised that he had succumbed to an overdose of laudanum.

PREACHERS AND PUBLIC HEALTH.

A **meeting** was held last week at the Mansion House, York, under the auspices of the Church Sanitary Association. Among the letters of regret at inability to be present was one from Mr. J. G Butcher, M.P., K.C., who expressed the opinion that it was of the utmost public importance that the Church had actively taken up so vital a question as the health of the people, and he wished the Church Sanitary Association every success in its efforts to bring about much-needed reforms by dispelling ignorance and stimulating public interest in sanitary matters. The Rev. F. Lawrence, honorary secretary, said it was desirable that at every examination of candidates for Holy Orders one paper should be on personal and domestic hygiene, to enable the clergy to co-operate with the sanitary authorities.

GOOD CROPS BRING PROSPERITY.

A **Georgia** farmer made £25 from an acre of watermelons, and the nearest doctor made £50 from the same acre.

MURDER STATISTICS.

While in London, with its six million inhabitants, there are, on the average, only about twenty murders annually, the United States can boast of no less than 10,000. If the same proportion obtained in London there would be 900 or 1,000. It is a significant fact that out of 145 murders in five years only twenty-three of the criminals were convicted, and not one executed. "So much hemp grown so little used!"

Appointments.

Baxter, Alexander Kidd, M.B., Ch.B.Edin., House Surgeon to Tiverton Infirmary and Dispensary, Devonshire.

Body, H. M., M.R.C.S., L.S.A., Medical Officer of Health of Crediton (Devon).

Holmes-Merrick, F. R., M.D.Dubl., Medical Officer of Health for the Rural District of Basingstoke.

Muir, D. C., M.D.Glasg., Medical Officer of Health to the Abertillery Urban District Council.

Nesbitt, R., L.R.C.P. and L.M.Irel., Medical Officer of Health to the Sutton in Ashfield Urban District Council.

Raby, L., M.D.Durh., Medical Officer for the Second District of the Devizes (Wilts) Union.

Robson, Henry Naunton, L.R.C.P.Lond., M.R.C.S., House Surgeon at the General Hospital, Stroud, Gloucestershire.

Sandiland, Digby S., M.R.C.S., L.R.C.P.Lond., Senior House Surgeon to the West Ham and East London Hospital, E.

Vacancies.

Assistant Pathologist and Demonstrator of Pathology at St. Thomas's Hospital and Medical School, London. Salary £250 per annum. Applications to the Treasurer's Clerk.

Brompton.—Assistant Resident Medical Officer, Hospital for Consumption and Diseases of the Chest. Salary £100 per annum, with board and residence. Applications to the Secretary.

Cancer Hospital, London.—Pathologist. Salary £250 per annum, Applications to the Secretary at the Hospital, Fulham Road. S.W.

Children's Hospital, Forest House, Nottingham.—House Surgeon. Salary £100 per annum, with board and residence. Applications to the Secretary, Mr. A. F. Kirby, St. Peter's Church Walk, Nottingham.

Cornwall County Asylum, Bodmin.—Junior Assistant Medical Officer. Salary £130, with board, furnished apartments, laundry, &c. Applications to the Medical Superintendent.

County Asylum, Chester.—Third Assistant Medical Officer. Salary £160 per annum, with board (no liquors), lodging, and washing. Applications to Dr. Lawrence, County Asylum, Chester.

East Sussex New Lunatic Asylum.—Appointment of Medical Superintendent. Salary £900 a year, with unfurnished house (the Committee paying rates and taxes), electric light as fitted. water-supply, coals. vegetables, milk, and washing. Applications to Reginald Blaker, Clerk of the Visiting Committee, 211, High Street, Lewes.

London County Asylum.—Junior Assistant Medical Officer. Salary £150 per annum, with board, apartments, and washing. Age under 30 years. Forms of application of the Clerk to the Asylum's Committee, 6, Waterloo Place, London. (See advt.)

Monmouthshire Asylum, Abergavenny.—Junior Assistant Medical Officer (Male). Salary £150 per annum, with board, lodging, and washing. Applications to the Medical Superintendent.

Roxburgh District Asylum, Melrose, N.B.—Assistant Medical Officer. Salary £140 per annum, with board, rooms, and washing. Applications to the Medical Superintendent.

The General Infirmary at Gloucester and the Gloucestershire Eye Institution.—House Surgeoncy. Salary £100 per annum, with board, lodging, and washing. Applications to the Secretary.

The Metropolitan Asylums Board.—Male Assistant Medical Officers. Salary £180 per annum, with board, lodging, attendance, and washing. Applications to Clerk, Metropolitan Asylums Board, Embankment, E.C.

Westminster Hospital.—Assistant Pathologist and Curator of the Museum. Salary 100 guineas a year. Applications to the Secretary by October 7th.

Urban District Council of Withington.—Hospital for Infectious Diseases.—Resident Medical Officer. Salary £120 per annum, with board, apartments, and washing at the hospital. Applications to Albert Roberts, Clerk, Town Hall, West Didsbury.

West Riding Asylum, Wadsley, near Sheffield.—Fifth Assistant Medical Officer. Salary £140, with board, &c. Applications immediately to the Medical Superintendent.

Births.

Cleveland.—On Sept. 18th, at 8, Thorpe Mansions, Norwich, the wife of Arthur J. Cleveland, M D.Lond., M.R.C.P., of a son.

Mallam.—On Sept. 15th, at Holywell Street, Oxford, the wife of Ernest Mallam, B.M., B.Ch.Oxon., of a son.

Voelcker.—On Sept. 17th, at 101, Harley Street, London, W., the wife of Arthur Francis Voelcker, M.D., F.R.C.P., of a son.

Marriages.

Connell—Sealy.—On Sept. 17th, at St. Mary Magdalene's, St. Leonards-on-Sea, Arthur Mayers Connell, F.R.C.S.E., of Sheffield, Yorkshire, to Emily Mary, second daughter of John Sealy, M.D., of Hill View, Barbados, W. Indies.

Dickie—Mitchell.—On Sept. 16th, at St. Mary's Episcopal Church, Glasgow, William Stewart Dickie, M.R.C.S, Middlesbrough, to Jean Kennedy, daughter of John Oswald Mitchell, LL.D., 7, Huntly Gardens, Glasgow.

Gullan-Goodwin.—On Sept. 17th, at St. Saviour's Church, Oxton, Birkenhead, Archibald Gordon Gullan, M.D.Lond., M.R.C.P., F.R.C.S., 37, Rodney Street, Liverpool second son of the late Archibald Black Gullan, of Swansea, to Agnes, third daughter of Ambrose E. Goodwin, of Oxton.

Stephenson—Johnson.—On Sept. 16th, at St. Barnabas's Church, Kensington, W. A. Stephenson, M.R.C.S.Eng., L.R.C.P.Lond., to Sarah Louise Johnson, both of West Haddon. No cards.

Winter—Hallett.—On Sept. 17th, at All Saints' Church, Penarth, G. Mitchell Winter, L.R.C.P., M.R.C.S., D.P.H., of Torquay, to Mildred Marion, elder daughter of George Hallett, of Crauford, Penarth.

Deaths.

Blacker.—On Sept. 17th, at 16, West Halkin Street, S.W., Arthur Barry Blacker, M.D., son of the late Rev. Maxwell Blacker, aged 40.

Field.—On Sept. 15th, at Quisisana, Benson, Oxon, Alfred George Field, F.R.C.S.Eng., aged 82.

Cockell.—On Sept. 18th, at 268, Dalston Lane, Hackney, Frederick Edgar Cockell, M.R.C.S.Eng., L.M., aged 72 years.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, OCTOBER 1, 1902. No. 14.

Original Communications.

COCCYGODYNIA.

By E. NOBLE SMITH, F.R.C.S.EDIN., &c.,

Senior Surgeon to the City Orthopædic Hospital, London.

THE lowest extremity of the human spine is occasionally the seat of much trouble arising either from accident or disease. The bone which forms this appendix, the coccyx, derives its name from its supposed resemblance to a cuckoo's beak. (*a*) It forms a rudimentary tail, and, like most rudimentary parts, serves no useful purpose in the human economy.

The late Mr. Hilton (*b*) called attention to the fact that the coccyx is liberally supplied with nerves of sensation in intimate structural communication with the anterior or sacral nerves, which again join the sympathetic plexus of nerves in the pelvis, and thence proceed to the uterus and ovaries, and that the gluteus maximus muscle is attached to it. Luschka (*c*) described a small gland freely supplied with nerves situated at the anterior surface of the end of the coccyx, intimately connected with the *ganglion impar* of the sympathetic nerve, and with branches of the middle sacral artery.

The word "coccyodynia" was invented by the late Sir James Y. Simpson, of Edinburgh, to describe a painful affection of the coccyx. The word has more recently been written coccygodynia as a more correct philological interpretation of the term "pain in the os coccygis" or coccyx bone. Sir James (then Dr.) Simpson wrote (*d*) regarding the name: "Besides that it is sufficiently terse to be easy of use, the designation presents this great advantage, that it involves no pathological theory as to the nature of the affection, but simply expresses its most striking symptom." In referring to the various diseases which may affect the coccyx, Simpson further remarks: "If more attention were directed to the pathological and anatomical history of this organ than has hitherto been accorded to it, it would probably be found to be subject to diseases and disorders such as have hardly been even suspected."

Dr. J. C. Nott, of New York, wrote to Simpson pointing out that he (Nott) had fifteen years previously described similar cases in the *New Orleans Medical Journal*, and Simpson published this letter in the *Medical Times and Gazette* of March, 1861.

But even previous to Nott's communication the subject had received attention. We find in James Blundell's "Obstetric Medicine," (*e*) a reference to coccygeal trouble. He states that inflammation of the sacro-coccygeal joint is often a cause, and this may be "wholly unconnected with pregnancy or parturition." One of his patients had adopted the expedient of sitting on the framework of a chair from which the cane seat had been removed. He also refers to suppuration of the joint in scrofulous subjects, and adds:—"I may remark, by way of suggestion, that you might perhaps remove the os coccygis altogether; for this bone does not appear to be of any very great importance in the skeleton."

As regards records of trouble from injury to the coccyx, we may go back to a much earlier period. Simpson remarks that Smetius, a professor of medicine in the University of Heidelberg, records in his diary:—"1588, October 27. My wife has fallen backwards, and so injured the coccygeal bone that she cannot sit without great pain, nor can she empty the bowel or the bladder, or cough, without much distress;" and other ancient records of cases are mentioned by Simpson and others.

Coccygodynia is probably always caused by some distinct disorder either of the bone itself or its immediate surroundings. The morbid condition may originate in rectal or anal troubles, or be reflex from some pelvic mischief, or it may more probably come from disease of the bone or chronic neuritis arising from previous injury.

Coccygodynia is sometimes associated with hysteria, and the relief of the local trouble is generally followed by relief of the other symptoms.

The coccyx may be injured by direct blows, and especially by falls in the sitting posture. Sitting down suddenly upon a small object which impinges upon this part is one of the most frequent causes. The bone may even be fractured, and Hamilton (*a*) refers to two cases recorded by Cloquet, (*b*) one produced by a kick and the other by a fall. In the latter case the coccyx became carious and was gradually exfoliated.

An injury may be caused in parturition. Dr. Robert Barnes, (*c*) in referring to this fact, remarks that he has known several aggravated cases follow labour, and he had no doubt "that the joint received injury during the passage of the child's head." Ankylosis may follow injury of any kind, and Dr. Barnes notes that the ankylosis is likely to give way during labour, and even where there is no ankylosis the anterior ligaments of the sacro-coccygeal joint may be ruptured and "inflammation is very apt to be set up." Simpson knew abscess to follow such an injury. Barnes further states that the disease occurs where no history of injury is present, and quite unconnected with parturition, as, for instance, in the unmarried. Ramsbotham (*d*) states that ankylosis often occurs in women who have been accustomed to sit the principal part of the day, "as is the case with milliners."

If an injury has been recently received there may be acute inflammation of the part. The coccyx may have been violently bent forwards, severely spraining the sacro-coccygeal joint, rupturing its ligaments or fracturing a portion of the bone. Upon examination, under such circumstances, the surgeon may find the bone displaced forwards, pressing on the rectum, or it may have regained its natural position.

Examination.—The surgeon should pass his forefinger

(*a*) It has also been called the huckle or knuckle bone.

(*b*) "Rest and Pain," by John Hilton, F.R.S. Second Edition. London, 1880.

(*c*) Virchow's "Archiv," 1860 ("Die Steissdruse des Menschen").

(*d*) "Clinical Lectures on the Diseases of Women." Lecture xvii. *Med. Times and Gaz.*, July 2nd, 1859.

(*e*) Edition revised by A. Cooper Lee and Nathaniel Rogers. London, 1840.

(*a*) "Fractures and Dislocations."

(*b*) Cloquet, art. "Bassein" of *Dict.*, vol. iii.

(*c*) *Op. cit.*

(*d*) "Principles and Practice of Obstetric Medicine and Surgery." By Francis Ramsbotham, M.D. Third Edition. London. 1851.

into the rectum and grasp the coccyx between it and the thumb placed externally. The condition of the bone can then be fairly accurately determined. Its position, mobility, &c., can be felt, and the effect upon the patient of pressure and movement of the bone can be determined.

Treatment.—If the parts are hot, swollen, and extremely painful, it may be desirable to apply hot fomentations, or even leeches, and a morphia suppository is very useful in subduing pain. Rest in bed is essential, and a simple purge should generally be administered. The bowels should be kept slightly relaxed for several days, until the acute symptoms have subsided.

If the bone is displaced it can, as a rule, be easily reduced to its natural position, but whether it will stay there is another matter. Complete dislocation may, however, resist all efforts at reduction without open operation.

Energetic treatment at this early stage of injury may result in perfect relief after a few days' or a week's rest and by making the patient use a horseshoe air-cushion when sitting, for a few weeks, all future trouble may be removed.

Chronic Cases.—It is the chronic cases which chiefly require our consideration, treatment of the acute being, as I have shown, sufficiently simple. In these chronic cases the symptoms are often obscure and frequently involve a general disturbance of the nervous system. Care in diagnosis is required. Pain may be localised by the patient at the exact seat of trouble, or may be more or less remote.

Spinal neuralgia, more often felt in the region of the sacrum or higher in the spine; pelvic troubles, such as a sense of "bearing down"; constipation from direct pressure of the bone on the rectum; irritability of the bladder; a sense of general discomfort in the pelvis or rectum, and other symptoms, sometimes obscure, may be present, and often the bone itself is not thought to be the exact seat of trouble until it is manipulated by the surgeon.

There is generally a difficulty in sitting down, and patients complain that they are never comfortable when sitting evenly on a chair. A tendency to sit sideways, inability to sit up straight in bed, and pain or straining during action of the bowels, are common symptoms.

Various remedies have been advised. Rest in bed, emollient and sedative local applications, and other measures to allay pain have been used, and doubtless such remedies have their value. If the bone is displaced and can be restored to its natural position and kept there, the patient may thus be relieved or even cured, but more often such remedies are only partial or temporary in their effects.

Subcutaneous section of the tissues close round the bone, with the object of cutting off its nerve supply, has been performed, but this is not a scientific procedure; it may relieve pain in the bone itself, but does not remove the displacement, or disease, such as caries, if these conditions be present Moreover, if the bone is pressing on the rectum, the operation does nothing to relieve that pressure. Dr. Thomas (a) resorted to subcutaneous section once. He found it fail entirely in giving relief. Sir James Simpson was obliged to remove part of the coccyx after failing to give relief by "separation of the coccyx from all the surrounding muscles, tendons and ligaments, which was done subcutaneously with a tenotomy knife."

Excision of the bone is the only certain cure, and if the palliative measures or replacement of a dislocated bone are not soon successful, an operation should not be delayed. It is hardly necessary here to describe the details of procedure, the bone being removed through a longitudinal posterior incision.

This is a safe operation, but care is required to avoid any injury to the rectum, which lies very close to the anterior surface of the bone.

In the following record of cases several methods of treatment are described, and it will not be difficult for the reader to judge which is best.

The late Mr. John Hilton described some cases which he treated upon the *rest* principle.

CASE I.—A young woman had fallen, ten months previously, upon the corner of a chair and had thus injured the coccyx. She had much pain when the bowels acted, or when she attempted to rise from a seat. She could walk but slowly and had great pain in going up stairs or in sitting down.

The coccyx was bent forwards at almost right angles with the last bone of the sacrum, and thus pressed upon the rectum. The joint between the two bones was swollen and very painful when the end of the bone was pushed upwards, and pressure upon any part of the bone hurt the patient.

The *treatment* was very tedious and was as follows. For eighteen days the patient had to lie down *as much as possible* and take medicine to keep the contents of the bowel soft. At the end of this time she was "*much relieved.*" About two months later she suffered "*no important inconvenience unless* she happened to sit abruptly upon a hard flat surface"; "the pointed end of the coccyx *annoyed the rectum somewhat,* but *she was getting accustomed to that*"!

The following year she is reported as "*remaining* well." (The italics are mine.) We may suppose that she had got quite accustomed to the point of the coccyx pressing on the rectum, or is it not more likely that she had learned to put up with it, as no other remedy seems to have been suggested? It was not good surgery to leave the bone in its displaced position.

Another patient, a girl, æt. 16, was quite well up to the time of the accident which injured the coccyx, but "since that time—about six months—she had suffered so much from pain, constipated bowels, and loss of appetite, as to render her general health anything but good."

The treatment was absolute recumbency for eight weeks; after that, carefully controlled exercise, part of the time being spent at the seaside. Mr. Hilton further stated that the patient "ultimately got quite well," except a slight disposition to be constipated.

The first case cannot be considered as perfectly cured, and the second hardly so, although both patients were subjected to prolonged recumbency and medicinal treatment.

Dr. Roeser (a) described a case in which there was lateral dislocation of the coccyx. It occurred in a very stout woman, who in jumping off a table fell astride a chair. Very severe symptoms followed. Besides severe local pain, for which she had to take to her bed, dragging painful sensations extended from the nape of the neck down to the ends of her fingers, which were numbed. Upon reduction, by passing a finger into the rectum and making traction, all nerve symptoms were removed and the patient was cured.

Skey recorded the case (b) of a young woman, æt. 20, who had had a fall three weeks before he saw her. The coccyx was found to be "thrown forwards at a right angle with the sacrum, the point projecting against the rectum." By pressure through the bowel it could be replaced, but upon removal of the finger it immediately returned to its former position.

Mr. Skey designed a small metal spring which he placed in the rectum, but the pain produced was so severe, and the difficulty of fixing the spring so great, that he had to give it up. He then cut down on the bone and passed a silver wire round it, and attached that to a back splint; the wire broke and he substituted strong thread. This treatment, as may be easily realised, was most painful and had to be relinquished, and after a few days "the bone returned to its abnormal relation with the sacrum."

Dr. A. P. Shands, of Washington, U.S.A., describes a very interesting and instructive case. The patient was a lady, æt. 22. Her family medical history was good, and she was perfectly healthy herself until the age of sixteen, when she had diphtheria, after which she was never strong. Two years after the diphtheria she was examined for symptoms thought to be those of disease of the vertebral column. She had been in an extremely nervous condition during this two years, never free from pain in some part of her body, and often in many places at the same time, sometimes in the stomach, at others in the abdomen, and often in the pelvic region. She suffered much from constipation and occasionally from diarrhœa. Headaches and insomnia would occur and continue for months at a time. It was even thought that she might have cancer of the stomach. Sleeplessness, low spirits, hysterical symptoms of various kinds, and a cough, incessant at times for four hours or longer, were some of the more prominent symptoms In bed she would lie on one side, with her thighs and knees flexed as much as possible, the knees pressing on the abdomen. Upon examination of the spine, no *definite* symptoms could be found. The other symptoms continued, and eighteen months later the chief point of suffering seemed to be the coccyx. Without dilating further upon the case, it may be said that the coccyx was ultimately excised. There was then found to be a new bony growth at the extreme end of the bone, a quarter of an inch long, with a carious cavity, another growth at the side of the bone half the size of that of the extremity. At the upper end of the bone next the sacrum, was found a carious cavity about the size of a pea. The acute symptoms were entirely relieved by the operation, but the health of the patient had become so undermined by the constant pain she had suffered, that she succumbed four months later from emaciation.

(a) "Diseases of Women." By T. Gaillard Thomas, M.D., London, 1880.

(a) *Brit. and F. Med. Chir. Review*, 1857, ii., 544.

(b) *Lancet*, October 5th, 1861.

Dr. Shands suggested that all the symptoms arose from the disease in the coccyx.

This paper was read before the American Orthopædic Association, June, 1901, and is reproduced in the "Transactions" of that association.

I will now describe some of the cases which I have met with.

Miss H., æt. 15.—November 16th, 1888. This patient was sent to me by Mr. Reginald Harrison. Two years previously the patient had fallen in the sitting position, a chair having been taken away by some one. A week later severe pain was complained of in the region of the coccyx, and this had gradually got worse. The coccyx was bent forwards, and was pressing on the bowel. The part was too painful to permit any interference without an anæsthetic. Under chloroform I passed my finger into the bowel, and with some difficulty pressed the coccyx into its proper position. The patient used a horseshoe air-cushion when sitting for some weeks, and was perfectly cured.

Miss C —February 27th, 1894. The patient felt pain for some months in the neighbourhood of the coccyx in sitting down and especially when leaning back. I found exostosis at the end of the coccyx, of which I recommended excision, and the operation was performed. I believe the result was perfectly satisfactory.

Miss N., æt. 17.—March 5th, 1897. She had felt pain in the region of the coccyx since the previous November. There was no known cause, but she had been riding a bicycle, and might have injured the coccyx by pressure. The pain was getting gradually worse; it affected her when she sat down, but not when standing.

The coccyx was displaced forwards. I replaced it per rectum, which immediately gave her relief. There was a tendency to redisplacement, but after several repetitions of the manual readjustment the parts recovered their normal condition, and the patient remained well.

[Since the above was written this patient has returned to consult me again (August, 1902), pain and discomfort having returned and general nervous symptoms having supervened. I now propose to remove the bone.]

Miss K., æt. 25, consulted me in April, 1899, in consequence of constant pain in the region of the coccyx. Two and a-half years previously she had hurt the lower part of the spine by falling down in a sitting position on the deck of a steamer. She felt pain for several months after this accident, but gradually got better. A year later she again injured the lower end of her spine. Getting off a bicycle quickly, she got caught on the point of the saddle. The symptoms were the same as after the previous injury, but much more severe. She could not sit at all for many days. One month later she was advised to have the part operated upon. Subsequently she went under other treatment, without any good resulting. I found the coccyx bent forwards, pressing on the bowel; it was extremely painful at the sacro-coccygeal joint. I removed the coccyx, through a linear incision, the wound was healed four days later, and the result has been excellent. With the exception of some slight attacks of neuralgia in the region of the part during the first few weeks after operation, no pain has been felt since, and she now (May, 1902) remains quite well.

Mrs. F., æt 42.—1897. About ten years ago this patient fell down stairs, striking the end of her spine on the edge of one of the steps. A child was born to her three months later, after which she suffered pain in the whole back. This pain became very severe, principally in the lumbar and cervical regions. Plasters of various kinds were applied. The last treatment employed was massage, which had to be given up because it only increased the pain. The whole nervous system seems to have suffered; pain was described as very severe in the head, with a "buzzing sensation," especially on the left side, "twitching of the eyes and head, left leg very weak." She suffered much from insomnia. For the last year she had not been able to sit evenly. I found the coccyx bent forwards and pressing upon the rectum, and upon examination (per rectum) I could feel a depression at the lower end of the sacrum adjoining the coccyx. Upon movement of the coccyx great pain was produced, which, however, soon subsided. The coccyx and the lower extremity of the sacrum were removed. The patient made a rapid recovery, and all the symptoms described above disappeared.

Mrs. B., æt. 26.—October, 1901. This lady had suffered for many years from aching in the pelvic region; she could not sit down evenly, and when she attempted to sit up in bed the pain was so great she was obliged to turn on one side. Mrs. B had long suffered from violent spasms in the legs on first going to sleep. Her husband stated that this symptom occurred almost every night. A year previous to her visit to me these symptoms had become so acute, and the general health of the patient was so much affected, that further medical advice was obtained, and as a result the uterus was "curetted," and one ovary, it was said, was "*replaced.*" This operation, or the rest it necessitated, seemed to give relief. This relief, however, was only temporary, for the pain soon recurred in the back, especially in the lumbar and sacral regions, and abdomen, with a sense of severe dragging somewhere in the pelvic region. The patient became highly nervous, emaciated and depressed, but there was no difficulty with the action of the bowels and no irritability of the bladder.

Upon examination per vaginam, I found the uterus and ovaries apparently normal and free from tenderness, but upon passing my finger backwards and pressing on the rectum and coccyx, the patient at once complained of acute pain. Upon examination per rectum and upon pressure from without, sufficient to move the coccyx, great pain was produced. Notwithstanding the general nervous and sensitive condition of the patient, there was no hysterical element in this case. No part of the body was sensitive to pressure but the coccyx.

Considering the long continuance of the patient's sufferings, I thought it was useless to try palliative measures, so I recommended excision. On October 26th, 1901, I operated and excised the bone. The wound healed up rapidly, and nine days later the patient commenced to walk about, feeling quite relieved from the former symptoms. She rapidly gained strength, and up to the present time (May, 1902) she has remained absolutely free from all her previous troubles and in every respect well, a condition she had not experienced for many years.

Mrs. W., æt. 38, had been delicate for a long time. She was an interesting patient from having suffered from bubonic plague some years previously in India. It was uncertain when her coccygeal symptoms commenced, because she had suffered from constipation and from hæmorrhoids for years. Neuralgia in the region of the coccyx was her greatest trouble, and of this she had had very violent attacks at intervals of a few weeks or longer. Upon examination per rectum, I found the sphincters very tight. The coccyx was painful upon pressure both externally and internally. I advised that in the first place a free dilatation of the rectum should be carried out. This I did under an anæsthetic, and as soon as the patient recovered from the shock of the operation, she felt hardly any of her previous pain, and a week later she was perfectly relieved not only from the coccygodynia, but also from all other symptoms of pain and irritation in the locality. The hæmorrhoids also ceased to trouble her, and up to now (May, 1902) this patient has remained free from these troubles.

Mrs. N., æt. 42, consulted me in March, 1901. She gave the following account of her case. Five years previous, a few days after straining herself by lifting some heavy furniture, she felt a sudden "crack" in the sacral region. This was accompanied with so much pain in movement of the legs that she had to rest entirely. She was obliged to rest in bed for three weeks, after which she began to get about with difficulty; she gradually got better, but was subject to a continued feeling of discomfort and to periodical attacks of pain and irritation in the region of the coccyx. Spasms in the legs, "jumping," were very frequent at night, and she never could rest comfortably in bed. Upon a thorough examination no symptoms of uterine, bladder, or other organic or functional disorder, except those associated with the coccyx and produced by pressure, could be found. I removed the coccyx and all her trouble disappeared. She remained well in May, 1902.

I have operated, by removing the bone, upon two cases quite recently, and so far they promise to be equally satisfactory.

The most remarkable fact connected with removal of the coccyx is in no instance has the patient experienced any weakness or other defect from the loss of the bone. The functions of the rectum and anus have been in no way interfered with. In fact, patients have described their condition as absolutely satisfactory in every particular.

Queen Anne Street, London.

Paris Clinical Lectures.

TRAUMATIC SCARLATINA.

By DR. R. DE BOVIS,

Professor at the School of Medicine of Rheims.

(Continued from page 323).

As we have just seen, the clinical aspect of surgical scarlatina, except in a few minor points which remain to be discussed, is exactly that of ordinary scarlatina. It is, therefore, natural for us to admit the identity of the two complaints.

If, however, we examine the cases in detail, we find several with rather abnormal peculiarities for scarlatina. We are no longer astonished at the objections raised by Hoffa, Brunner, Strubell, &c. This last one indeed admits only two cases of traumatic scarlatina—his case and that of Leube; all the others are alleged to be erythema, due either to vasomotor troubles, intoxications, or septicæmia. Certainly, mistakes are easily made, and they are perhaps numerous, but they generally appear to be avoidable. That all the authors except two should be mistaken appears to us unlikely.

Independently of this argument, I am enabled to bring forward direct proofs in favour of the existence of surgical scarlatina. We need not insist upon the old adage *Non bis in idem*, in other words, that a patient already a prey to an infectious complaint, does not contract a second. There are exceptions to this rule, and without seeking far, we have the example of scarlatina and diphtheria, so often co-existent in the same subject, while influenza, pneumonia, and mumps are observed almost daily in the care of the wounded. Moreover, the wounded do not fall into the category of "infected" patients, merely because they have a suppurating lesion; they are merely "febriles."

The direct proofs which we can bring forward in favour of the reality of traumatic scarlatina are of four kinds: bacteriological, experimental, epidemiological, and clinical.

The bacteriological proofs have, it is true, but a limited value, since the specific microbe of scarlatina has yet to be discovered. Many facts, however, seem to point to the streptococcus. In 1828, Büdeler admitted that scarlatina might follow erysipelas; Lasch Hertzka, Triwousse, Sörensen, and Patin made the same statement. In two cases, on the contrary, it is traumatic scarlatina followed by erysipelas. A statement by Mr. Solly is equally in favour of these associations:—"Every time," he says, "that I observe a surgical case presenting grave phlegmonous complications, I am sure to observe either a case of erysipelas or scarlatina attacking the inhabitants of the house." At the present day MM. Babes, Volkovitch, and Baginski are inclined to consider the streptococcus as the pathogenic agent of scarlatina. The last named has constantly found the streptococcus in scarlatinal angina at the commencement, and in the ventricular blood of subjects who have died within the first forty-eight hours of the attack.

Moreover, in the rare cases of surgical scarlatina in which a bacteriological examination was made (Strubell, Brunner, d'Espine, and de Marignac), it is also the streptococcus or a very similar microbe which has been noted.

The data furnished by experimental work concern inoculation of scarlatina, which is a genuine surgical scarlatina. Till last year there was a great scarcity of cases of this kind. In the classic treatises, indeed, only the experiments of Stoll, Petit-Radel and Leroy d'Etiolles are mentioned. These observers experimented on themselves and obtained, all except Stoll, negative results. With the aid of Ashmead and Stickler, two American physicians, our knowledge of this subject has been slightly extended, although it still remains very incomplete.

Ashmead, having noticed that scarlatina is very rare in Japan, which leads one to attribute a certain immunity to the native race, inoculated a Japanese with the scales of a young German in the twenty-fifth day of his illness; he flattered himself that he had thus obtained a serum conferring immunity on the European race. The day after the inoculation and the day after that the subject experimented on had slight headache, and the forearm inoculated was slightly swollen. On the third day a scarlet ring was observed around the wound caused by the inoculation; the throat was red, and there was fever and itching. The following days the ring remained stationary, then retroceded, and finally commenced to desquamate on the eighth day. At the end of twenty days the patient was well. The convalescence had been slightly retarded by a recurrence of the sore throat. In this case the scarlatina, if it was scarlatina, ran a rather abnormal course.

Stickler took mucus from the throat of a scarlatinal child, and dissolved it in a 1/600 solution of carbolic acid. Injected into guinea-pigs, this only caused very slight local reaction; two or three children out of the ten (of white race) whom he inoculated nevertheless developed either abscesses or sloughs. The shortest duration of the incubation was thirty-two hours, the longest seventy-two hours. Redness of the throat, in other words the eruption, was constant, except perhaps in one case. The ordinary painful throat appears to have been absent in two cases, and to have been very ephemeral in the remainder. No mention is made of diphtheroid exudations; in two children nephritis was noted. By good luck there were no deaths.

These experiments show that scarlatina may be conveyed by cutaneous inoculation when the incubation period is short, the sore throat slight or *nil*, but redness of the throat is pretty constant. With respect to the starting-point of the eruption nothing is said; in Case IX. it is, however, permissible to think that the exanthem was more pronounced in the neighbourhood of the little wound, because there was an "extensive desquamation all round the point of inoculation." If we compare these results with the clinical aspects of surgical scarlatina, we find they have this in common: a shorter incubation period than that of ordinary scarlatina, and milder throat symptoms.

At the International Medical Congress at London, Howard Marsh recalled that Mr. (now Sir) Thomas Smith had observed seven cases of scarlatina in forty-three lithotomised children. At that time, surgical and medical patients occupied the same building, and when the services were isolated, surgical scarlatina became very rare.

The twenty-five observations of surgical scarlatina collected in the practice of Paley, at Guy's Hospital, and published by Goodhart, are all of them very briefly recorded, rendering impossible a retrospective diagnosis; the fever may therefore not improbably include sundry cases of septicæmic, toxic or other form of erythema; but the fact remains that these eruptions often occurred in series, that contagion was often possible, and that these cases fell off directly a redistribution of the patients enabled infectious subjects to be isolated, instead of, as previously, occupying the same building as the traumatised children.

The work of E. Koch is still more convincing. Between 1875 to 1882, at the Hospital for Children at Bâle, not a single case of scarlatina occurred among the diphtheritic patients. From 1882, for some reason, scarlatina appeared in those operated for diphtheria in short series of four or five cases. The first patient in each series was usually a child who had not been tracheotomised, and had probably contracted scarlatina outside; twenty-one cases of scarlatina occurred, fifteen of which were in tracheotomised subjects. Among the other patients during this same period sixteen cases of scarlatina occurred, also grouped in short series.

In 1886 the scarlatinal subjects, who had, till then, occupied the same building, were transferred to another building, and thenceforward no cases of scarlatina occurred in the surgical patients except one case in 1887, and in the tracheotomised subjects it disappeared for nearly two years, after which two little epidemics occurred.

The fact that surgical scarlatina may occur in epidemic series, with all the appearances of infection, fully justifies me in asserting a connection with medical scarlatina.

Clinical proofs of the relationship between surgical and medical scarlatina exist in the description which we gave of the first of these affections. Taken as a whole, this description reproduces almost exactly that of ordinary scarlatina. The differences which are noted are five in number, and bear on the proportion of children attacked, the duration of the period of incubation, the throat symptoms, the starting-point of the eruption, and the date of onset of desquamation. We need not take cognisance of the changes in the wound, because this symptom belongs exclusively to surgical scarlatina.

The proportion of children under ten is, in medical scarlatina, 90 per cent.; in surgical scarlatina it is reduced to 75 per cent. This difference may be explained by the fact that, in the young, traumatisms are numerous, and, so to speak, of daily occurrence, but of little gravity; they are consequently easily overlooked, and their possible relationship to scarlatina is therefore missed. In the adult, on the contrary, traumatism is rarer, but more violent, and the patients, as is well known, do not fail to take note of it.

The second clinical difference between the two varieties of scarlatina is the difference in the duration of the period of incubation. This is on an average two and a-half days in traumatic scarlatina, and three or four days in the medical variety, a difference of about a day. We may suppose that cases (incorrectly) diagnosed as scarlatina contributed to the former minimum; but we must not forget that in the experiments of Stickler the incubation period averaged thirty-two hours, and clinical observation confirms this experimental result. It is, therefore, permissible to regard the shortness of the period of incubation as one of the characteristics of surgical scarlatina.

The third difference concerns the throat symptoms, which, in traumatic scarlatina, are slight, and were even absent in ten cases, while in ordinary scarlatina they are pretty constant, often pultaceous and diphtheroid, or even diphtheritic. To explain this difference we must repeat that, in the mass of observations of surgical scarlatina, infectious or other erythemata must have slipped in, which do not generally comport throat lesions, or at most only faucial redness. But once again we must refer to the experiments of Stickler, in which the throat symptoms were very slight, and was absent in one case out of ten. We must therefore hesitate to admit the cases in which throat symptoms were absent, although this default does not justify our rejecting them. The mildness of the throat symptoms or simple redness of the fauces does seem, as a matter of fact, to be peculiar to traumatic scarlatina, or at any rate to certain cases thereof.

A fourth difference is furnished by the starting-point of the eruption. In surgical scarlatina the eruption often starts from a peripheral lesion, spreads like lymphangitis, and finally invades the whole of the body. This appears to be a very abnormal course, assuming the infection to be communicated in the same way as medical scarlatina; but it appears quite natural, if we suppose that the traumatism was directly a factor in enabling the germs of scarlatina to penetrate *via* the solution of continuity thus established; in other words, by producing inoculation scarlatina.

A last difference exists in the slightly earlier advent of desquamation which appears, at the earliest, about the sixth or seventh day, in cases of surgical scarlatina, while in medical scarlatina, it only appears from the sixth to the ninth day. It is difficult to suggest a reason why desquamation should be earlier in one case than in the other; moreover, this would not appear to be an essential characteristic of traumatic scarlatina, and may be the result of error of diagnosis. As we shall presently see, scarlatiniform or scarlatinoid erythem is characterised by earlier desquamation than ordinary scarlatina.

We will now discuss the relationship of scarlatina to traumatism; in other words, the mechanism of infection in surgical scarlatina. Several hypotheses have been emitted on this subject:—

1 The infection may have taken place either a little before or just after the trauma, and the coincidence of the two may be pure coincidence.

2. Scarlatina may supervene in a wounded subject as an intercurrent affection.

3. The trauma may have weakened the resistance of the organism, thus favouring the development of scarlatina, which, under other circumstances, might have remained latent.

4. The trauma may have afforded an entrance and inoculated the infection of scarlatina *pari passu*.

Of these four hypotheses, the first two would withhold from the traumatism any direct influence in the development of scarlatina. The other two, on the contrary, recognise a relationship between scarlatina and traumatism.

The first that of simple coincidence, admitted by König and especially defended by Treub, seems to bear only on exceptions. As a matter of fact, if traumatism goes for nothing, we must suppose that the contamination occurred either before or after the injury, and in which event the attacks of scarlatina should be more or less uniformly distributed over the days following the traumatism. But this is not the case, for our statistics give, in the first three days, a minimum of nineteen cases a day, while the following five days only give four. This distribution is observed not only in isolated cases, but in the total statistics of Goodhart, Koch, Sörensen and Murray.

The second supposition, that of intercurrency, is suggested forthwith by the hospital series of Goodhart and Koch. Some of their patients only contracted scarlatina a long time after their admission to hospital (several weeks, a month or more). In these cases we may admit that the infection took place in the usual way, and that the scarlatina was merely an intercurrent affection; *i.e.*, it was scarlatina in surgical patients, and not surgical scarlatina, properly so called.

We must, however, bear in mind that, in the long pre-scarlatinal periods the patients were tapped several times, that on each occasion they had little wounds, and that the scarlatinal germs, if present in the environment, were able to enter the circulation through the wound, thus provoking a genuine traumatic scarlatina. Goodhart and Nossovitch, it is true, regard this mode of entry as very doubtful; they think it strange that the scarlatinal germ should resist the germicidal action of the antiseptic dressings. The remark seems just enough when it refers to a fresh antiseptic wound, but a suppurating wound of long standing is practically impossible to render aseptic solely by means of dressings, while, in respect of the granulation layer, we all know how fragile that is.

Of the two hypotheses just discussed the first deals with exceptions and the second with cases of scarlatina which appear so long after the traumatism that they cannot be attributed to it. There remain the cases in which the interval does not exceed, or exceeds but little, the ordinary duration of scarlatinal incubation. These may be explained, according to circumstances, by one or other of the two hypotheses which still await investigation.

The influence of traumatism on susceptibility, since the famous experiment of Max Schuler and the publications of Verneuil, is too well established to be disputed here. A certain number of cases, moreover, plead in favour of this opinion. Lippmann observed a recurrence of scarlatina in a child who had been struck; the germs of the first attack, in a latent condition, found, no doubt, thanks to this trauma, fresh conditions favourable to the reinfection of the little patient. Koch states that among 127 tracheotomised children at the Hospital for Children, at Bâle, there were fifteen cases of scarlatina; while of 151 non-tracheotomised children there were only six. Murray, in a ward which contained twenty-three operated and four non-operated patients, noted six cases of scarlatina in the former and one in the latter. At first sight the proportion seems the same, but we must bear in mind that five out of twenty-three operated subjects had already had scarlatina, whilst the four non-operated subjects had not had it. Sörensen records the instance of three sisters who were all three attacked by diphtheria and removed to hospital at the same time. The two eldest were tracheotomised and contracted scarlatina; the youngest, who was not operated on, remained free from it. Thus traumatism does not confer immunity as Treub affirmed was the case; on the contrary, it predisposes to scarlatinal infection.

The precise mechanism of its action may be explained in several ways. The infection may be more or less coincident with the traumatism or only develop in the days following, owing to the vital depression caused thereby; it may take place *via* the throat, as in medical scarlatina, or be conveyed by the blood and localise itself at the site of the injury (Volkovitch). The latter process might explain exanthemata starting at the periphery, and the slight severity of the morbid phenomena in the throat.

There are cases, however—and they are numerous—in which the incubation period is extremely short (half a day, one, two, or three days at most), and the traumatism quite trivial. It would, therefore, be absurd to have an argument on any supposed increase of susceptibility determined by the traumatic lesion. But if we bear in mind the shortness of the incubation period in the experimental scarlatina cases of Stickler, nothing is more natural than to admit the existence of traumatic inoculation, especially as, very often, the surgeon, the patient, or the person who inflicted the wound, may have treated scarlatinal patients, or may have been actually suffering from scarlatina. Traumatism and contagion thus act simultaneously in respect of the wound; the spread of the eruption from the wound, and the diphtheroid changes which it may undergo, thus find a perfectly natural explanation.

It is precisely in the cases where the existence of inoculation scarlatina was possible, that we have reason to complain of the silence of authors in respect to the changes in the wound itself. If it had been observed that the wound, like the tonsils, was covered with a diphtheroid exudation at the onset or during the course of scarlatina, we should have gained a fresh proof both of the path followed by the germs and the correctness of the diagnosis. The reason why I insist so much on a symptom which was only once mentioned (Beaudouin) is because L. Meyer and Sörensen have both met with it in puerperal scarlatina, the homologue of surgical scarlatina. "It is quite possible," says Sörensen, "that the infection gains an entry by the genital passages, because in parturient women the scarlatina presents a very special feature, viz., the absence of sore throat and the diphtheroid and inflammatory aspect of the external genitals. In patients tracheotomised for diphtheria who subsequently developed an eruption similar symptoms are noticed; sore throat being absent, but a copious exudation covers the lips of the tracheal wound. We must admit that the symptom in this case loses much of its importance.

To recapitulate, a certain number of cases have been included under the head of surgical scarlatina, in which the scarlatinal infection was not of surgical origin, but was merely scarlatina occurring in a surgical subject, as an intercurrent disease; in such cases it is "scarlatina of the wounded" and not "surgical scarlatina." The term traumatic or surgical scarlatina ought to be restricted to cases in which the traumatism appears to have determined a diminution of resistance of the organism with regard to infection, and still more to those in which the wound at the same time opened the door and effected the inoculation. In both the eruption follows closely on the trauma.

If there are all sorts of reasons for admitting the existence of surgical scarlatina, and even for regarding it as frequent, its diagnosis, to be maintained, requires the rigid exclusion of everything that may resemble it

Scarlatiniform eruptions are met with under many circumstances, but chiefly (1) following certain drugs; (2) as a manifestation of various dermatoses; and (3) in septicæmia.

The diagnosis of toxic exanthemata is generally facilitated by the history. The patient has been taking belladonna, copaiba or mercury; he has been inoculated with a serum (venous transfusion, injections of antidiphtheritic serum); he has been dressed with blue ointment, iodoform, carbolic acid, &c. If there are no indications in the history, these eruptions always present certain polymorphic peculiarities.

Carbolic acid eruptions are generally seen in the regions subjected to its action; there is continuous œdema without albuminuria, but when the irritating action is prolonged little vesicles or pustules form; the urine may become black or contain albumin. The appearances only resemble scarlatina in many exceptional circumstances; and any confusion between this kind of eruption and scarlatina must be a very rare occurrence.

Balsamic eruptions (copaiba, cubebs, &c.) are usually of the roseolar type: small lenticular patches of a rose-red colour are scattered over the skin which is healthy between them, while in scarlatina the eruption appears in large patches which soon coalesce. Fever is usually absent with medicinal eruptions.

The belladonna eruption is of a much more scarlatinal type, but its evolution is rapid and is not followed by desquamation. The fever is usually trivial, and other symptoms of intoxication may be discovered (mydriasis, dryness and constriction of the throat, parched feeling of the mouth, &c.). Here again it is difficult to believe that they have ever been confused, either the one or the other, with traumatic scarlatina.

Mercurial exanthema deserves closer attention, since very slight doses of the poison are sufficient to bring about its appearance. Mercurial intoxication does not, however, in its ordinary forms, bear much resemblance to scarlatina; the eruption, pretty general, occupies the lower part of the belly and the upper part of the thighs; at its periphery it has a roseolar aspect; the patient complains of salivation, a metallic taste, and the examination of the gums reveals the characteristic lesions. In its grave forms, it is true, the mercurial eruption may be of a scarlatinal type; the urine may become albuminous, and the temperature may be raised. It is questionable, however, whether in presence of such a well-marked intoxication the buccal symptoms can be absent or be overlooked by the observer.

Under the name of acute scarlatiniform erythema, or "scarlatinoid," certain eruptions of diverse or obscure origin are described which may give rise to considerable difficulty in diagnosis. The eruption has, indeed, a scarlatinal appearance, the throat is red, albuminuria may be found, and desquamation occurs in large scales; and if the patient happens to have received some injury the case may be described as surgical scarlatina. A careful examination enables us, however, to recognise certain differences between the two affections: The eruption of scarlatinoid subjects has not usually that scarlet tint which seems to be characteristic of both surgical and medical scarlatina and which the English call "the lobster-like look." Nor has the tongue that bright-red appearance, "strawberry tongue," and that varnished aspect which, with the white deposit in the centre, constitutes what is known as the "strawberry tongue." In scarlatinoid subjects the throat may be red, but in no case do we observe genuine sore throat with painful swelling of the tonsils. Though the desquamation may occur in large scales, it is generally early. According to M. E. Besnier, it appears when the eruption commences to fade, *i.e.*, two or three days after its appearance, while in surgical and even medical scarlatina it rarely appears until towards the sixth day. The eruption of scarlatinoid subjects is often itchy, which is rare in real scarlatina.

It is incontestable that the clinical picture of scarlatinoid subjects is singularly like that of surgical scarlatina, especially as, in the latter, the throat symptoms are slight or merely eruptive. It is, therefore, quite likely that several cases of this kind have slipped in among the observations of traumatic scarlatina, especially the cases where the throat presented no abnormal appearance, or in which desquamation was very early. I question, however, whether the error has been as frequent as is supposed, because contagion or epidemicity accounts for a good third of the cases, and because the desquamation appeared, at the earliest, on the sixth day, that is to say, at a relatively advanced period.

The recurrent scarlatiniform erythema described by Féréol has, not improbably, often been mistaken for scarlatina, and it is perhaps on this account that opinions are divided as to the frequency or rarity of the recurrence of scarlatina. However this may be, and as will appear from the observations of Féréol, Rossigneux, and Kramstyck, these kinds of eruptions are met with mostly in nervous subjects, especially in females; they occur from very slight causes, emotional or traumatic; they are generally itchy, have a copious desquamation, are not accompanied by throat symptoms, and recur with the greatest facility, one patient of Kramstyck having had nine attacks.

I have referred above to three patients, those of H. Page, Konetschke, and Schäffer, who had had, the first two, three attacks, and the last, two attacks. In reference to Page's case we must bear in mind that the third case, in spite of the objections which may still be raised, had very much the appearance of true scarlatina, since one of the students was attacked in his turn by it. But the cases of Konetschke and Schäffer seem *à priori* much more questionable; in the first subject the throat did not show any change; it could not be examined in the second, who had tetanus; in both cases the eruption was associated with miliaria, which is rare in scarlatina, and in one of the subjects the skin became somewhat œdematous, without albuminuria, another equally exceptional peculiarity; lastly, the recurrence took place less than fifteen days afterwards, sometimes even before the first eruption had altogether disappeared. It must be admitted that we are confronted with many anomalies.

We must always think of septicæmic eruptions in the presence of a scarlatiform eruption in a surgical subject suffering from suppurating lesions. Although, theoretically, confusion is possible, I think that in practice distinction is comparatively easy. First of all, these eruptions do not appear to be very common; Verneuil was one of the first to describe them, and since then the only cases on record are those published by Tremblay, Terrillon, Savart, Gilbert Ballet, S. Manning, Bosc, Auché and Læsel, J. Weiss, Colleville and de Bovis.

These eruptions are not usually of a frankly scarlatinal type; the patches or stains, which are rarely scarlet, are irregularly distributed. In one of Verneuil's cases they occupied the dorsal aspect of the limbs, they occasionally invade the face, but there is no sore throat. The desquamation which follows is branny or in small scales, and is most marked in the neighbourhood of the wound. There may also be itching (Colleville and de Bovis), which is a rare symptom in scarlatina. Moreover, these patients are generally feverish, even before the eruption, for they are already the victims of an infection either medical (Manning) or surgical; and in the latter case we usually observe a closed, or more or less patulous focus of suppuration. Among other associations are: Anthrax, (Verneuil), metritis and abortive pelvi-peritonitis (J. Weiss), gonorrhœa (G. Ballet), prostatic abscess (Bosc), retro-mastoid sub-periosteal abscess (Colleville and de Bovis), &c. The eruption may be covered with miliaria, or even petechia (Auché and Læsel). Lastly, the temperature, with its irregular oscillations, does not at all resemble the febrile curve of scarlatina. Such mistakes have probably not been frequent; nearly half the cases we have mentioned go as far back as the commencement of the antiseptic or even to the pre-antiseptic period; thus it is certain that surgeons of that epoch knew pyæmia and septicæmia too well not to be able to diagnose them.

With regard to septic exanthemata, we know that vaccination may be followed by the appearance of various eruptions, sometimes of a scarlatiniform aspect, but these can always be distinguished by the peculiarities just mentioned. We have seen that E. Koch claims to have observed true scarlatina following vaccinal inoculation.

To sum up, the relationship between scarlatina and traumatism seems to be real. If, at the present time, surgical scarlatina is less frequent, it may be explained by the more perfect isolation of infectious subjects, and by the progress of medical antisepsis.

From a pathogenic point of view the relationship may be simply due to chance or to the intercurrent development of the infectious complaint; but the cases are few in support of this explanation, and do not establish anything more than the occurrence of "scarlatinas in the wounded." True surgical scarlatina appears soon after the traumatism, either by the latter creating a *locus minoris resistentiæ*, or by direct inoculation of the germ of scarlatina.

There is no reason to suppose that "scarlatina of the wounded" differs from ordinary scarlatina. On the contrary, in those cases in which traumatism could be invoked, either as having favoured the development of scarlatinal germs in the wound or by inoculating them therein, the clinical picture is slightly modified. The incubation period is reduced as compared with ordinary scarlatina, the eruption appears first around the wound, which may assume a diphtheroid or gangrenous aspect, and the throat symptoms are very slight and may even be simply eruptive.

The predisposition which traumatism engenders in the direction of an exaggeration of susceptibility to scarlatina seems, in any case, quite real: moreover, the surgeon who has been in contact with scarlatinal subjects or who moves in scarlatinal surroundings, ought to abstain from operating, at any rate until he has taken the most rigorous measures of disinfection and antiseptic or aseptic precautions, not only in respect of his person, but also his assistants, his patient, and the premises.

Professor Orth, of Göttingen, has been appointed successor to the late Professor Virchow, to whom thirty years since he acted as assistant. He has been Professor at Göttingen since 1878.

DILATATION OF THE STOMACH. (*a*)

By NOEL D. BARDSWELL, M.D., M.R.C.P.,
Physician to the Sanatorium, Mundesley,
AND
J. E. CHAPMAN, M.R.C.S., L.R.C.P.,
Clinical Pathologist to the Sanatorium, Mundesley.

The following conclusions have been arrived at as a result of routine examination of stomachs in all cases under our care for the treatment of pulmonary tuberculosis.

1. Practically in all cases of early disease, whether slight or fairly acute, of say from three to six months duration, the stomach is found to be normal in size, the only exception being those who give a history of prolonged antecedent dyspepsia. This means that as far as the tone of the stomach is concerned, generous ordinary diets can safely be given, practically to all early cases, with the exception of chronic dyspeptics. The importance of examining stomachs in such cases, before administering ordinary sanatorium diets, is obvious.

2. That although the stomach of early cases will usually stand the administration of very large diets, there is a tendency for prolonged hyperfeeding to cause dilatation, and this dilatation may exist without giving rise to any symptoms of dyspepsia. In the event of a relapse, however, this condition, as a probable precursor of atonic dyspepsia, would certainly be a cause of anxiety.

Clinical experience suggests that other things being equal the longer such patients are kept at absolute rest (and such treatment usually implies the existence of fever) the greater the tendency to atony and dilatation.

3. That sanatoria cases admitted with acute extensive disease who will probably be some three to six months before losing their fever, and who consequently will be largely at rest for that period, run greater risks of developing atonic dyspepsia and later dilatation of the stomach than any other type of consumptive. The prolonged administration of huge ordinary diets to consumptives of this clinical type, especially after the development of symptoms characteristic of atonic dyspepsia, is, in our opinion, absolutely unnecessary and unjustifiable in view of the serious prognosis which must be given when active pulmonary tuberculosis is associated with dilatation of the stomach.

During the past two years we have had under our care eight patients (originally of the acute type of pulmonary tuberculosis which we are now considering) who had previously been some six months in sanatoria where excessive feeding is practised. In five of these patients we found definite enlargement of the stomach, and in each case this was associated with marked anorexia, dyspepsia, vomiting of yellow fluid before breakfast, and general malaise throughout the day, symptoms which had existed for a long period.

It is only fair, however, to record that in four out of the five cases the disease in the lungs had obviously been considerably arrested by the treatment. It is interesting to note that in three of these same patients the anorexia, dyspepsia and vomiting entirely cleared up under more physiological dieting, and that in two the stomachs largely recovered their tone, one, in the course of three months, retracting from 21 cm. vertical measurement by 15 cm. transverse measurement to 18 cm. and 12 cm. in the same diameters, and the other in the course of fifteen months gradually retracting from a measurement of 15 by 14·5 cm. to one of 9·5 by 11, this latter being the average of the normal stomach (Addison).

Another case entirely under our own care is of interest from this same point of view, viz., that of a young man admitted with acute and extensive disease, with high fever, &c. After four months' treatment at rest on a weighed diet, he had lost his fever, gained 26 lbs. in weight, being now a trifle over his normal weight, and was convalescent; but although he had normal appetite and digestion his stomach measurement had increased from 15 cm. by 15 cm. (on admission) to 18 by 16. The average value of his diet for these four months was: Proteid 137, fat 135, and carbohydrate 269.

The following is a sample of the actual diet taken in a day:—Milk, 3 pts.; soup, 7 ozs.; eggs, 2; chicken, 3 ozs.; mutton, 3 ozs.; potatoes, 4 ozs.; butter, 2 ozs.; bread, 5¼ ozs.; sugar, ¾ oz.; milk pudding, 5 ozs.; and stewed apple, 4 ozs. These somewhat odd amounts taken are accounted for by the fact that the diet was calculated in grammes.

By the end of the next four months he was completely restored to health, with arrested disease, and was walking seven miles daily.

On examination at the end of that period his stomach was found to be normal again, though his diet had remained unaltered.

In this patient the stomach was probably saved by his making a good recovery and thus being able to take considerable exercise; if, on the other hand, he had drifted into chronicity and persevered with the same diet, he would almost certainly have become a victim to atonic dyspepsia with a dilated stomach.

On the strength of experiences of this sort, we now, when dealing with similar cases with symptoms of atonic dyspepsia, amend the diet by reducing its bulk without diminishing its nutritive value. The following is a sample of such a diet:—Milk, 2½ pts.; eggs, 2; fish and meat, 5½ ozs.; butter, 2 ozs; milk pudding, 7 ozs.; arrowroot or cornflour, 4 ozs., plasmon, 1½ ozs.

The weight of this diet is 74 ozs., as against 98 ozs. of the former, or a reduction of 25 per cent., and its nutritive value is a trifle higher, viz., 147 of proteid compared with 137, the fats and carbohydrates being the same in both.

4. Chronic cases of several years' standing have almost invariably pronounced anorexia and dyspepsia, and in our experience about 50 per cent have some degree of stomach dilatation. In spite, however, of their frequently starting treatment thus handicapped, their stomachs appear to stand sanatorium treatment better than one would expect.

The facts that the majority of chronics are sufficiently convalescent to take exercise, and that they are very difficult indeed to stuff on account of the anorexia may help to account for this.

THE
USE OF CHLORATE OF POTASH
IN THE
TREATMENT OF CASES OF HABITUAL DEATH OF THE FŒTUS IN THE LATER MONTHS OF PREGNANCY. (*a*)

By ROBERT JARDINE, M.D., F.R.S.E.,
Senior Physician to the Glasgow Maternity Hospital, &c.

The author remarked that this method of treatment had been introduced more than a half a century ago by Sir Jas. Y. Simpson, who had introduced it

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(*a*) Abstract of paper read at the British Medical Association Annual Meeting, July-August, 1902.

(*a*) Abstract of paper read before the British Medical Association Meeting, Manchester, July-August, 1902.

with the idea that oxygen would be given up to the maternal blood and the fœtal blood would thus be aërated in spite of the degeneration of the placenta. The chlorate did not give up its oxygen, but it had a beneficial action through the endometrium.

Dr. Jardine remarked that some years ago he had incidentally mentioned this method of treatment in a clinical lecture on abortion, and had been severely taken to task by a writer in a therapeutical journal, who had maintained that the continued use of chlorate of potash would assuredly act deleteriously upon the maternal blood. He (Dr. Jardine) had found by experience that in these cases this theory was quite erroneous. He gave the drug in ten-grain doses thrice daily from about the end of the third month onwards until delivery.

Case I.—A multipara with two previous stillbirths came under observation when six months pregnant. There was no evidence of syphilis. She was given the chlorate, and was delivered at full time of a healthy child and a macerated premature one. The latter had been dead when the patient began to take the chlorate.

Case II.—A multipara, who had had three stillbirths, was treated from the fifth month and went to full time. The child was strong and healthy.

Case III.—This patient went to full time on three occasions when taking the chlorate, and on at least five other occasions miscarried. On one occasion immediately after delivery she seemed to be dying. There had been a fair amount of post-partum hæmorrhage, and a douche had been given when the patient began to gasp and said she felt as if her chest had an iron band round it. She asked to be changed from her left to her right side, and Dr. Jardine turned her over, when she immediately drew a long breath and said she was all right. He thought that it must have been a case of air embolism.

In conclusion, he mentioned the alternative treatment by induction of labour, which he had tried in one case of his own, and had been associated with Dr. Reid in another case. In both cases the child had been born alive but had died within a few days. He therefore preferred administering the chlorate and allowing the patient to go to full time.

Special Articles.

CRIMINAL STATISTICS, IRELAND.

The Twenty-fourth Report of the General Prisons' Board, Ireland, for 1901-1902, just published, is an interesting record of the criminal classes in that country. As we turn the pages of the report we are struck with the fact that our prisons have ceased to be torture chambers and have become disciplinary and reformatory. The spirit that actuated Elizabeth Fry still lives, though the philanthropic effort of to-day lacks the personal influence of the early movement. The keynote of the present system is employment; old and young criminals, short-termed prisoners and long-termed ones are provided with a daily task; occupation is found for all. In the case of those undergoing a long term of imprisonment a trade is taught, and before the term is completed the prisoner, by his industry, becomes more than self-supporting, and his mind has become familiar with healthy thought his trade has necessitated. The current of his thoughts has come to run in a new channel, and he has learned that industry can secure money and creature comforts without the risks of crime. So far, the experiment has borne good fruit, the percentage of failures being comparatively small. Very interesting is the deterrent influence of the inebriate homes to which old offenders are sent. It is too soon to expect them to produce a marked effect on drunkenness, which is so dependent on the prosperity of the people; but an enforced residence for months in an inebriate home, where work is enforced and stimulants are not allowed, is deterrent, and the care of the physical condition during detention so builds up the strength that the offenders are better able to resist the temptation of drink on regaining liberty. To the physician, the morbidity statistics are of interest, and it tells greatly to the credit of the medical officers of these institutions that the cases are so few, particularly, as many of the more serious diseases were contracted outside the prisons. In all Ireland there were but two cases of typhus fever, both of which were contracted before admission; of typhoid there were but eight cases, none of which could be traced to any water or food pollution, and as there were cases of the disease in the immediate neighbourhood it is reasonable to conclude that the toxin was air-borne. Of alcoholism, including delirium tremens, there were 775 cases; of rheumatism, 906 cases; syphilis, 279 cases; scabies, 351 cases; neuralgia, 714 cases; chronic bronchitis, 358 cases; bronchial catarrh, 478 cases; and of catarrh, 627 cases. Withal there were but six deaths from disease—two from pneumonia, two from cardiac syncope, one from tuberculosis, and one from uræmic convulsions. When we think of the class from which these patients come, the statistics of these 19,494 patients is an honourable testimony to the skill and attention of the medical officers.

The appendix gives particulars of each case of insanity among prisoners in local and convict prisons during the year ending December, 1901, and of the seventy-eight cases we find that no less than thirty-nine were persons connected with agriculture, fifty-two of the whole number could both read and write, and that fifteen could neither read nor write. This is a large percentage of illiterates, for fully 85 per cent. of the population between ten years and thirty-five can both read and write, and is something to the credit of the beneficial effects of education. Those who give alms indiscriminately to importunate beggars might with advantage note that of two beggars committed to prison as vagrants one had £2 10s. 3d. in his possession, together with a bank book showing £114 0s. 9d. to his credit, while another had £60 15s. 5d. Lastly, we would note the decrease in the number of convicts in custody on January 1st for some years past: In 1855 they numbered 3,427; in 1860 they were 1,631; in 1870, 1,230; in 1880, 1,031; in 1890, 578; in 1900, 329; and in 1901 they had fallen to 292. A decrease which may be looked on as an unequivocal proof of the improved condition of the people.

SCOTCH LUNACY BLUE-BOOK.

The Forty-fourth Annual Report of the General Board of Commissioners in Lunacy for Scotland is charged with interest, to the lay reader as well as the medical, and it well maintains the reputation of its predecessors. The total number of persons of unsound mind at January 1st last, who were under the supervision of the Commissioners' Office, was 16,288, an increase of 389 over that of the previous year. During the year the following changes have taken place as regards the registered insane. Private patients in asylums have increased by 44, and in private dwellings by six; pauper patients in establishments increased by 358, and decreased by 38 in private dwellings. The increase of pauper patients in establishments during the past year has been 84 in excess of the average of the past ten years. The average recovery rate in Royal and district asylums was 39 per cent. of the admissions, and in private asylums 43 per cent. There were 227 private patients discharged recovered during 1901, which is six below the average for the five years 1895-99. The number of pauper patients discharged recovered was 1,268, which is 59 above the average for the five years 1895-99. The number of patients discharged unrecovered, excluding transfers, was 517 (114 private and 403 pauper). The death-rate for private and pauper patients was 8·0 and 8·5 per cent. respectively on the average number resident. Table X., Appendix A, shows the annual number of deaths, and classification of the causes of death, of patients who died in asylums and other establishments, for each year from 1870. General paralysis, as a cause of death, continues to increase, especially among males. Death was attributed to this disease in the case of 136 males and 31 females. During the year 152 patients were liberated on probation from the various institutions. The Commissioners think a more frequent use of this form of discharge in some of them would probably lead to a larger number of permanent discharges taking place.

The important question of changes occurring among the attendants and servants is again introduced. The whole number who left, were dismissed or died, was 977, which is 67 less than the number recorded for the previous year. The number who resigned their situations voluntarily was 706, 50 left on account of ill-health, five died, 29 absconded, 52 were dismissed for incompetence or unsuitability, six on account of their services being no longer required, and 129 for misconduct. The Commissioners again recommend that the administrators of asylums in which changes among attendants occur frequently should inquire carefully into the causes, and should endeavour to remove them by offering increased inducements to good attendants to remain, and to a better class to take service. Their experience tends to show that, in the case of men, a high class of attendant and security for permanent service are best obtained by increasing the number of married attendants. We have on numerous occasions advocated the adoption of these recommendations, but we must admit there are often untrustworthy reasons assigned for leaving, and many causes which are difficult to fathom and comprehend. The problems of asylum service are undoubtedly difficult, and all asylums do not occupy the same favourable position. Some easily find material of service, while others experience great difficulty, and geographical position, nearness to towns, certainly play an important part in the stability of a staff. There is no doubt the service is trying and the hours long, and that the absence of pensions in Scottish asylums is a great drawback. The Commissioners seem to have great faith in the register they keep of attendants and servants dismissed for misconduct, and that it prevents these persons from securing a permanent engagement in another asylum. We know this register does good, but if it were conducted on a more elaborate scale it would prove of real assistance to superintendents.

The whole number of escapes during 1901 was 190. Of these, 96 were brought back within 24 hours, 45 within a week, and 19 after a week. There were 30 still absent on the expiration of 28 days. The whole number of accidents reported was 264. Of these, 17 ended fatally, death in eight of these cases being due to suicide. The circumstances of all the deaths by suicide and accident were investigated by the Crown authorities and the Commissioners. Embodied in the general report are reports by the Deputy Commissioners on the condition of patients in private dwellings. As usual, these reports contain much of interest regarding the management of the insane in private dwellings. Dr. John Macpherson reports it is worthy of record that in few instances was it suspected that the food, personal clothing, or the sleeping arrangements for the patients were defective. Dr. Sutherland is satisfied, having now traversed almost every parish in Scotland, and visited patients in 600 parishes, that the possibilities are great if only inspectors of poor as a whole, following the excellent example of a few, bestowed the time, labour, trouble and care necessary to make boarding-out a success. Dr. Charles Macpherson saw no patient who had the slightest appearance of being insufficiently fed, and the impression left by his visits was, on the whole, a favourable one. There is no doubt the system of boarding-out chronic insane men and women in private dwellings is a good one, and one we would like to see more popular with inspectors of poor and parish councils.

Some interesting information is given as regards the cost per patient in district asylums, of land and buildings, and of the maintenance of each patient. At May, 1901, pauper lunatics of Scotland maintained in district asylums were costing the country a yearly rent per head of £16 6s. 8d., which, added to the average cost for food, clothing, &c., gives the total cost of pauper lunatics in all district asylums as £43 4s. 9d. per patient. The question of cost is a matter of very great importance to the ratepayer, and nowadays there seems to be too great a tendency towards extravagance in the erection and furnishing of our asylums. When we think of asylums costing as much per bed as would build a comfortable cottage for a workman and his family, it seems nothing short of scandalous.

More could easily be said regarding this interesting and practical report, but space forbids our going further into detail. There is abundant evidence throughout the report of eager endeavour to safeguard the interests of the insane, and to convince the public that its insane poor are being well cared for, for which Scotland has every reason to feel grateful.

France.

[FROM OUR OWN CORRESPONDENT.]

Paris, September 28th, 1902.

DILATATION OF THE STOMACH.

Prof. Robin, who is a recognised authority on gastric affections, has treated with a masterly hand the now well-known affection, dilatation of the stomach. However, he does not recognise the existence of the dilatation, in the absence of an obstacle, from atony, paralysis, or atrophy of the muscular tunic, which he qualifies as "rare." He admits only gastric distension, the consequence of spasm or stenosis of the pylorus allied to hyperasthenia with hyperacidity of fermentation. Under the name of dilatation Prof. Robin proposed to group functional troubles as atony or gastric myasthenia and lesions as dilatation by atrophy or degenerescence of the muscular coat.

Soupault, in a recent monograph, said that dilatation appeared as a secondary state, the pathological signification of which is subordinate to the very variable causes on which it depended, or, in other words, the diagnosis of dilatation is without meaning unless an explaining cause were added. For him dilatation was the *ensemble* of motor troubles, having for result a too prolonged sojourn of the aliments in the stomach, and as a consequence the delay of their passage into the intestines, whether the volume of the viscera were increased or not.

This definition corresponds fairly with the present idea of the question; dilatation (an improper term, since increase in volume is not indispensable) is the useless prolongation of aliments in the gastric ventricle, producing troubles more or less prolonged, more or less grave.

In a clinical point of view account may be taken of only two varieties, one of which is very important, dilatation due to an obstacle at the pylorus; it is the true dilatation according to Robin; the other, that described by Soupault, and due to insufficient contraction.

The causes which produce the first variety are numerous: they are intra or extra gastric. In the first group is found stricture of the pylorus, cancer, ulcer, polypi, fibroma; in the second, less important compression of the pylorus by the liver, kidneys, hypertrophied ganglions, spasms of the pylorus, &c.

The most characteristic signs and symptoms of the affection are, says M. Robin, epigastric undulation, tension of the same region, pain, regurgitation, eructations, vomiting, all of which follow the repast, persist an hour or two and disappear until food is taken again. When these phenomena appear a long while after taking food (two hours) the pylorus is very probably the origin of the trouble.

The treatment is medical and surgical. The former consists in the administration of alkaline solutions to diminish or destroy the hyperacidity of the gastric juice; in the employment of bismuth in large doses, and sulphate of soda as recommended by Prof. Hagem:

Sulphate of soda, ʒj;
Bicarbonate of soda ʒss;
Chloride of sodium, xx grs.;
Water, one quart.

Ten ounces of this solution are taken fasting in the morning, and in three parts, twenty minutes between each. The dose should be increased by two ounces, every morning, up to half a quart. Among other means recommended may be mentioned olive oil, antiseptic substances, washing out of the stomach, purgatives, massage, electricity.

The surgical treatment is gastro-enterostomy and pylorectomy. The former is reserved for all the varieties of ulcer of the pylorus, and is, concludes M. Robin, an excellent operation, while pylorectomy, which consists in the ablation of the tumour, is a much graver operation and not always favourable in its results.

Germany.

[FROM OUR OWN CORRESPONDENT.]

Berlin, September 27th, 1902.

The *Deutsch Med. Zeit.*, No. 71, has a reference to a paper by Dr. Westphalen on

Round Ulcer of the Stomach.

As regards treatment, the author commences with the so-called abstinence treatment, in which nothing is given by the mouth beyond a little cold tea, or Vichy water, or bits of ice. If the abstinence is long continued, nutrient enemata are used. Rost, of the Augusta Hospital, keeps food by the mouth from his patients for six days. Whether food in the rectum sets up gastric secretion or not, it is an undoubted fact clinically that in cases of gastric ulcer the painful symptoms disappeared more quickly by withholding food from the stomach than by any other method of treatment. In an extreme case the author continued the abstinence for sixteen days. After completion of the abstinence period he gives four glasses of milk per day, increasing the quantity by half a glass each day. After ten to fourteen days he gives soups and more solid food. He counsels a long-continued milk diet (fresh milk or whey) with the addition of cream, which reduces the hyperacidity of the stomach, the milk food keeping the motility of the stomach at a minimum. Passing over local applications, such as poultices, &c., which many would think unnecessary, he gives large doses of bismuth, a heaped-up teaspoonful in a glass of water before breakfast in the morning. In no case does he keep his patient in bed less than three weeks. Even when all active symptoms have subsided, his patients must keep to a carefully regulated diet for at least a year. Von Sohler recommends a chiefly vegetable diet, as by this the hyperacidity is favourably influenced.

The *Therap. d. Gegenwart*, 3/1902, contains an article by Dr. v. Tovölgyi on the

Nerve Remedies for the Treatment of Laryngeal Tuberculosis.

In strong people with commencing tubercle of the larynx the disease must be actively treated. By insufflation of powder of any kind valuable time is wasted; it can at most only serve to clean the ulcers, and thus act as accessories to more active measures, galvano-caustic curettage, painting, &c. This latter is to be looked upon as the normal procedure, and among the remedies for local application lactic acid stands first. This, under local anæsthesia, should be applied at first as a 30 to 35 per cent. solution, but the strength of the solution should then be raised rapidly to 75 or 80 per cent. It is more suitable, however, since no local anæsthetic is required, to use a 30 to 50 per cent. solution of sodio-sulphoricinate of phenol, which is specially active in disease of the vocal cords. It has not the same favourable effect on ulcers as lactic acid. Orthoformol (25·150) is indicated when there is pain in the act of swallowing. Menthol in 20 per cent. oily solution is inferior to this; it may relieve the dysphagia, but it cannot always be borne, as it causes burning and stabbing pains. It is advisable not to use any remedy when no further improvement is observed from its use, and a change should then be made. If there come a time when all remedies seem to fail a pause should be made in the local treatment, and change of air recommended.

The *Prag. Med. Woch.*, 24/1902, contains an account, by Dr. Chiari, of so-called

Banti's Disease,

together with histories of certain cases. In 1894 Banti published some cases which he assumed to belong to a hitherto-undescribed form of disease, the essentials of which were primary enlargement of the spleen, with anæmia, with which were associated later cirrhosis of the liver and ascites. The cases described by Chiari were four in number, and were briefly as follows:—

Case I. was that of a young woman, æt, 18, who had malaria in her fifth year. In her fifteenth year she had a splenic tumour with anæmia, which improved for the time under quinine and iron. Diminution of the erythrocytes; leucocytes normal. Three and a-half days before her death the spleen, which weighed 1,250 grammes, was removed. At the autopsy a severe hepatitis, which had remained latent, was found. The liver was atrophied. Thickening of the carotids and of some of the cerebral arteries, coupled with the youth of the patient, placed the diagnosis of hereditary syphilis beyond doubt.

Case II. was that of a man, æt. 20, who died from pyæmia. The spleen was greatly enlarged. Alcoholism was denied. At the post mortem, along with the changes due to pyæmia were enlarged spleen, thickening of the spleen capsule, and thickening of the parenchyma chronic interstitial hepatitis, with cicatricial bands and ascites. Probably hereditary syphilis.

Case III. was that of a girl, æt. 20, who had had splenic tumour and anæmia from her third year. Clinically there were enlargement of the liver and ascites, diminution of the erythrocytes, leucopenia with lymphæmia. Death through bursting of a varix in the œsophagus. At the autopsy the usual condition was found, enlarged spleen with thickened capsule, hyperplasia of the parenchyma, old chronic hepatitis with firm cicatricial tissue. Probably hereditary syphilis here also.

Case IV. was that of a man, æt. 25, who had already been ill a year. Chronic cirrhosis with caput medusæ, enormous spleen, anæmia with extreme ascites. Malaria and alcoholism could both be excluded. Laparotomy showed that the omentum was extensively adherent, and the wound was therefore closed. The autopsy showed marked atrophy of the liver, enlarged spleen with connective tissue growth in the reticulum of the pulp. Here also the cirrhosis and enlarged spleen must be attributed to hereditary syphilis.

Austria.

[FROM OUR OWN CORRESPONDENT.]

VIENNA, September 27th, 1902.

PNEUMO VASOMOTORS.

THE question of vasomotors in the lung has given rise to many hypotheses in physiology. Lichtheirn affirmed that the vasomotor action was well marked in the lung. Openchowski and Wagner stoutly asserted that it is *nil*. Strubell, in Basch's laboratory, has recently devoted his attention to the subject, and, in a paper read at the Medical Congress, gives a list of experiments which tend to prove some action of that nature in the lung. If, after injecting strophanthin both vagi be cut and the proximal ends stimulated, the blood pressure falls, but the frequency remains the same. The pressure in the left auricle will be correspondingly reduced, while that in the pulmonary artery will be somewhat increased and the lung-volume diminished, which proves the accuracy of Basch's early teaching of the pathological circulation of the blood, in which he demonstrated by models a reduction in calibre of the pulmonary vessels.

TROPHIC CUTANEOUS NEUROSIS.

At the same meeting Müller presented a female patient with a multiple gangrene of the skin which commenced after a scald on the right leg. Since that time, with five intervals, she has developed about thirty gangrenous patches within three years, which spread along the right leg with alarming rapidity. The onset is heralded by pain; reddening and vesication followed in seven or eight hours by the whole becoming gangrenous. Whether this was simply a case of multiple trophic neurosis, with consequent gangrene of the skin, or due to syringo-myelia, he was as yet unable to decide.

THE EFFICACY OF BATHS.

At the Congress Müller drew attention to the effect of baths on the circulation. When the water was not in motion the efficacy of the bath depended on the temperature or thermal stimulus. When the temperature is below the average normal the typical curves are altered in proportion to the variation in temperature, the blood pressure going up while the pulse declines in frequency. When the bath is taken at 40° C. (104° F.) there is a temporary rise of blood pressure, which, however, soon begins to sink, going below the normal, subsequently rising for a longer period. If the bath be taken at 38° C., the variation is not so great; but if above 40° C., the variation increases and continues longer, just as in the case of the cold bath, with the difference that the pulse is increased in frequency in the latter and reduced in the former.

In respect of baths in running water the intensity of the mechanical movement must be calculated, which is best illustrated by the "douche," which acts on the blood pressure independently of temperature, its effects being exerted violently and at once, but these effects are not so lasting as in the other forms.

CUMULATIVE ACTION OF DIGITALIS.

Fränkel has been experimenting with the different preparations of the drug in order to discover the least dangerous form. All the preparations appear to be bad, but "digitoxin" is the worst in this direction, and should therefore not be used when the drug requires to be continued for any length of time. Digitalinum verum, on the other hand, is quickly eliminated, and may be used with perfect safety for a long time.

Strophanthus is more fleeting in its effects, but equally efficacious in its action.

WORK AND BLOOD PRESSURE.

Schott has recently been experimenting with Gärtner's tonometer to test his former results, and he finds that half of the standard labour is sufficient to produce acute dilatation of the heart even in a healthy person. Exercise for treatment of heart disease should be moderate, and when the pulse and breathing become affected the effort should cease; up to this point the blood pressure is high according to the tonometer, but as soon as the breathing becomes affected and tachycardia with arhythmia appear the tonometer comes down even as far as 20 to 30 m.m. of mercury. This condition can be demonstrated in the healthy in sporting exercise, when it often becomes excessive.

Hoffmann thought the first sign of over-exercise was not the reduction of pressure, while the dilated action of the heart is often marked by its more powerful contraction. Arhythmia is not a sign of dilatation according to this observer. The distention of the heart is not a physiological condition, but a pathological state that does not appear and disappear rapidly, as some appear to suppose.

LIGHT THERAPY.

At the same meeting, Bie raised the question of treatment by light, but dwelt more particularly on "Light Biology." From his own experiments he found that the red, yellow, and green rays did not cause inflammation of the skin or lung tissues which was in accord with the results obtained by Bouchard, Widmark, and Finsen. The ultra-violet rays, on the other hand, caused a dilatation of the vessels in the living frames that lasted at least five or six months after. He is unable to allege any proof that light acts on the hæmoglobin, nor does he agree with Moleschott and others that light increases the elimination of carbonic acid.

The chemical rays of light, he admits, have a stimulating action on the lower animals, and probably act similarly on man; and in this regard the red rays are more active, while the violet rays, on the other hand, have a calming influence on the psychical centres: the latter, he considers, to be an active agent in the treatment of maniacal patients.

The red rays penetrate deeply into the organism, while the blue and violet rays are more superficial in their action, depleting the cutaneous blood vessels. The ultra-violet rays cannot be made to pass beyond the cutaneous tissues, a fact which at once proves their uselessness as germicides in the organism, therefore it is idle to talk about killing tubercle bacilli in the larynx or lungs by means of these rays, as has been affirmed by some American authors.

The Operating Theatres.

MIDDLESEX HOSPITAL.

Excision of Popliteal Aneurysm. — Mr. John Murray operated on a man, æt. 32, who was suffering from a popliteal aneurysm in the left thigh. The patient, who was a sign painter, had had syphilis twelve years ago, for which he had not been efficiently treated; he also had been rather a free drinker; he had never done any laborious work. He noticed pain in the left popliteal space a month before admission, and a week later he observed a swelling at the back of the knee; this gradually increased, and at the time of admission filled up the whole of the popliteal space. During the last week before admission he had suffered from severe pain in the back of the knee and leg, and had not been able to fully extend the knee. He complained that he felt out of sorts, and had completely lost his appetite. On admission the patient had rather a sallow complexion, and looked decidedly ill; his temperature was remittent in character, reaching 101° at night, and never falling below 99°; pulse 104 to 120. The heart's apex-beat was slightly displaced, and percussion showed the heart to be somewhat dilated; there was no cardiac bruit present, and the arteries did not appear to be rigid or tortuous. In the left popliteal region there was a tense swelling about the size of a large orange, filling up the whole space. The superficial veins over it were very prominent; there was pulsation of an expansile character; on compression of the femoral artery the swelling diminished and the pulsation ceased. There was a loud bruit in the aneurysm, and the pulsation in the dorsalis pedis was delayed. Any attempt to extend the leg caused great pain. The spleen did not appear to be enlarged. The urine contained no blood, sp. gr. 1010, with a trace of albumin. The patient was kept under observation for a few days at rest in bed, during which time the aneurysm steadily increased in size, so much so that the man had to keep his knee permanently flexed. It was therefore decided that an operation was necessary, and that excision of the aneurysm seemed the most suitable method of dealing with it. The patient was anæsthetised, and placed in a prone position, the left knee being supported by a pillow. A tourniquet was applied to the femoral artery at the apex of Scarpa's triangle; an incision 6 ins. long was then made over the middle of the popliteal space commencing above and slightly to the inner part just over the opening in the tendon in the adductor magnus and extending down to the lower limit of the popliteal space. The superficial tissues having been divided, the deep fascia was incised and the internal popliteal nerve which presented drawn inwards. An attempt was then made to separate the sac from the surrounding structures; the sac, however, ruptured on doing this, so it was freely laid open and the contents turned out. A careful search was next made for the popliteal vein, but this structure could not be defined; the point of entry of the popliteal artery into the sac was easily seen, and a ligature was placed round the vessel; in the same way the vessel below was easily secured. The sac of the aneurysm was shelled out, one or two vessels requiring to be secured by ligature. Before removal of the sac a cord was seen on its inner side, and this on investigation proved to be the popliteal vein completely blocked by a clot; the vessel was tied and part of it taken away with the sac; the tourniquet was removed, a few bleeding points ligatured, and after all oozing had ceased the wound was closed, a drainage tube being introduced, cyanide gauze dressing applied, and a back splint put on, the leg and foot being wrapped up in cotton wool. Mr. Murray said that the choice of operation here lay between excision or proximal ligature either of the femoral artery or of the popliteal just below the opening in the adductor magnus. He chose the former as being more likely to be effectual and, considering the size of the tumour, less apt to be followed by gangrene caused by interference with the anastomotic circulation; moreover, the rapid formation of the aneurysm and the rapid increase in the size of the swelling since admission into the hospital rendered this case in particular not well adaped to treatment by proximal ligature. If one of the two forms of ligature were in any case desirable, he said he would much prefer ligature of the popliteal in the upper part of the space, owing to the fact that it left the anastomotica magna intact. He mentioned a case on which he had operated two years before, in which the femoral artery had been previously tied for a popliteal aneurysm, but return of the aneurysm occurred; in this case he performed excision of the sac with a most satisfactory result. With regard to the origin of the aneurysm in the present case, the question arose, he pointed out, as to whether it might not be due to the softening of the vessel wall as the result of an embolism due to septic endocarditis; the patient's general appearance, his persistent temperature and quick pulse, suggested some constitutional disturbance, and the extremely rapid formation of the aneurysm was in keeping with this possibility. A careful examination of the heart, however, had failed to justify such a diagnosis, and bacteriological examination of the blood had given a negative result. With regard to the operation he had just performed, he pointed out that the important steps were the isolation of the internal popliteal nerve and of the popliteal vein; the nerve had been easy to find, but although a careful search was made the vein could not at first be discovered; this was subsequently found to be due to the vessel being thrombosed and closely incorporated with the sac of the aneurysm. Another point he mentioned was the importance of keeping as close as possible to the sac of the aneurysm when dissecting it out, and that this step was facilitated by laying the sac freely open as had been done here. He also thought that securing any vessels as they arose from the sac of the aneurysm and ligaturing them before division saved trouble in subsequently arresting the hæmorrhage. After an operation of this kind, when the tourniquet has been removed, there is, he said, always considerable oozing from a number of small vessels, and it is important not to close the wound until this has subsided; on that account, after all the vessels had been tied the wound was packed with swabs, and pressure kept up for a few minutes; after removal of the swabs the edges of the incision were brought together by a continuous suture and a drainage tube introduced; he said it was desirable to use a tube in these cases: first, because of the size of the cavity left; secondly, on account of the unyielding nature of the structures bounding the popliteal space; thirdly, because of the amount of oozing likely to occur. The subsequent treatment would consist in the tube being removed on the third day and the stitches taken out at the end of a fortnight. The limb had been put on a splint in a position of slight flexion for the first few days, mainly to avoid any motion caused by the possible struggling of the patient on recovering from the anæsthetic; it would subsequently be placed between sandbags.

The wound healed by first intention; the anastomotic circulation was good. The patient's temperature continued above normal, but on the whole it remained lower than before the operation, and the general condition of the man is now, three weeks after operation, much improved.

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"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 1, 1902.

THE USE OF CHLOROFORM DURING LABOUR.

In spite of the courageous example set by the late Sir James Y. Simpson, when he had recourse to what French obstetricians ironically called *chloroforme à la Reine*, practitioners have looked askance at the use of chloroform as a routine measure during labour, some, no doubt, because the induction of partial anæsthesia adds considerably to their responsibility and trouble of obstetrical work, already, it may be urged, quite sufficient in their way, others because they have allowed themselves to be influenced by the teaching of the Continental school of obstetricians who have consistently condemned its use under ordinary circumstances on the ground that chloroform-narcosis hinders uterine contraction and thus predisposes to post-partum hæmorrhage. In a recent communication, Dr. T. W. Parkinson, of London, advances a plea for the more general recourse to the drug, which he defends against the insinuations and accusations of which it has been the object for so many years. As a matter of fact there is very little trustworthy clinical evidence in support of the allegation that chloroform, when properly administered, in any way predisposes to post-partum hæmorrhage. French investigators, it is true, affirm, as the result of long and careful observation, that the uterine contractions really are diminished in number and intensity in direct proportion to the amount of the drug inhaled, but the reduction in the expulsive force is, in all probability, due merely to paresis of the abdominal muscles and not to any interference with the uterine muscle. Moreover, in normal labour, it is open to question whether a slight diminution in the contractions may not be of direct service by reducing the risks of rupture of the perineum, &c. Be this as it may, Dr. Parkinson affirms that he has never seen a case in which post-partum hæmorrhage was associated with the rational administration of chloroform, and this, we fancy, would be the experience of practitioners who are in the habit of using chloroform in their obstetric practice. It is an invaluable means of obtaining relaxation of a rigid os uteri, a condition which so commonly protracts labour, and this effect is produced with comparatively small doses. It is not denied that if chloroform anæsthesia be pushed to a surgical degree cessation of the pains may be brought about, although it is often observed that the rest thus afforded to the jaded uterus is followed by the resumption, after an interval, of steady regular contraction. It is a mistake to postpone chloroformisation until quite the end of labour, if for no other reason than that its maximum benefits are thereby frustrated. The arguments in favour of the routine use of chloroform are based on its rational administration. It should not be given too early, that is to say, while the pains are still bearable, and under ordinary circumstances it is unnecessary at any stage to push anæsthesia to the surgical degree. It is particularly in the obstetrical use of chloroform that the advantages of a regulating inhaler are most manifest. A fraction of a drop of the drug can be pumped into the mask with every inspiration, and with this inhaler the proportion of chloroform vapour can be increased or diminished with the greatest ease and certainty. Few women whose pangs have been assuaged and rendered tolerable by the rational administration of chloroform would ever consent to face the ordeal without it. Should it become necessary to apply the forceps or perform any other obstetrical operation, the anæsthesia can be forthwith increased without any fuss and without exciting apprehension on the part of the patient, and in the event of a perineal rupture the damage can be made good before consciousness is allowed to return. We should require very cogent and well-supported reasons to induce us deliberately to withhold these advantages from suffering women, and so far it does not appear that valid arguments have been advanced against habitual resort thereto.

RADIO-ACTIVITY,

Radio-activity is one of the characteristic and engrossing physical phenomena of the opening years of the twentieth century. Radiations pervade the heavens above; they traverse the earth beneath; and they permeate the waters under the earth. "Space is all aquiver with waves of radiant energy, ranging in length from many feet to a size infinitesimally small. To only a few of these are our bodily senses fitted to correspond, or our mechanisms to detect. Waves of radiant energy constitute what has been called 'the harp of life.' We vibrate in sympathy with a few strings here and there—with the X-rays, actinic waves, light waves, heat waves, in the treble, and the huge electro-magnetic waves of Hertz and Marconi and the grand air waves of sound in the bass; but there are great spaces, numberless strings, an infinity of possible radiations, to which we are deaf. Some day, a thousand years hence, we shall know the full sweep of this magnificent harmony, and with it we shall vibrate in accord with the Master Musician of it all." Thus spoke Professor Robert Kennedy Duncan of the "Becquerel rays," whose vibrations have recently agitated the intellectual media of all the foremost communities of civilisation. Becquerel's discovery of the rays which now so much agitate the collective thought of the scientific world owes its original inspiration to that of the X-rays of Professor Röntgen. The metal uranium and the salts thereof have long formed a special domain, which has proved a most fruitful hunting-ground for the researches of investigators in the department of physical optics. While experimenting with one of those compounds—the double sulphate of uranium and potassium—Professor Becquerel made the startling discovery that its proximity affected a photographic plate through a fold of black paper, and a sheet of metallic aluminum, copper, &c. He also soon found that its vicinity rapidly discharged the gold leaves of an electroscope—at some distance. Here was a new light: unexpectedly shed on one of the darkest nooks of the domain of physical science. The last-mentioned effect was necessarily through the medium of the air; and further research showed that "metallic uranium was about three and a-half times more active in *ionising* air than is the double sulphate of uranium and potassium." At about the same date M. Niewenglowski obtained a corresponding photographic impression with calcium sulphide; and M. Troost with hexagonal blende. In 1898, M. Schmidt and Mdme. Curie observed—independently of one another—that thorium possesses analogous properties. But the further investigations of the latter accomplished lady revealed the fact that there are certain minerals more active than any of the agents we have named. The greatest interest was soon concentrated on the mysterious properties of *pitchblende*. From this peculiar mineral they separated an active bismuth—possibly a new element—to which, in honour of Mdme. Curie, who is a Polish lady by birth, they gave the name of *polonim*. They shortly afterwards separated an active barium, which contained a new element, *radium*. This element has not been obtained in the pure state, but its chloride, which has been made and studied with elaborate care, has been found to be possessed of wonderful properties indeed. It is, of itself, luminous; and is, accordingly, able to produce its own photograph; its presence—by radiation—produces various chemical reactions; it colours glass; it converts oxygen into ozone; changes yellow phosphorus to red; ionises not only gases but liquids—such as petroleum and liquid air; and insulates solid bodies, such as paraffin—developing in the latter substance a residual conductivity which lasts a long time after the direct influence of the radium has been removed. And a further property is announced which will more especially interest the pathologist: the proximity of radium to organic tissues causes deep burns, analogous to, and much more severe than, those produced by the X-rays of Röntgen. Another characteristic peculiarity of those Becquerel rays has since been established by further experimentation: that their action is influenced only by the density of the substance which is exposed to their penetrating power. The Becquerel rays have been shown, on further investigation, to consist of a mixture of two kinds of emanations—one deviated and the other not deviated by the influence of a magnet. And the final result obtained is that: "The properties of the deviable Becquerel rays are identical with those of the X-rays of Röntgen."

CONSUMPTION AMONG THE INSANE.

For some time alienists have realised that consumption was becoming exceptionally prevalent among asylum inmates. In 1899, Dr. F. G. Crookshank and Dr. Eric France clearly showed that pulmonary tuberculosis occurred in cases of mental derangement to an extent which was evidently largely determined by the non-hygienic conditions of life in the large institutions in which these unfortunates were of necessity confined. The matter was discussed by the Medico-Psychological Association, and in 1890 a Tuberculosis Committee was appointed to gather trustworthy evidence. Meanwhile attention has been directed to the matter by various writers. Sir James Crichton-Browne, at last year's memorable Tuberculosis Congress, presented the valuable evidence which had been collected by Dr. Frederick Hearder, at the West Riding Asylum. Investigation of 500 consecutive post-mortems on persons from fifteen years of age and upwards showed that in 170, that is to say, in 39·2 per cent., tuberculous lesions existed. In ninety-three cases, or in 18·6 per cent., there was active tubercle; and in 103 cases, or 20·6 per cent., there was obsolete tubercle. The recently published report of the Medico-Psychological Association amply confirms the worst fears, and proves, without shadow of doubt, that pulmonary tuberculosis is prevalent in our public asylums to an extent which calls for urgent measures A very large number of these cases have acquired the disease after admission to the asylum. The special causes for this increased prevalence of phthisis in asylums seems to be overcrowding, with consequent insufficient day, and especially night, cubic space per patient; insufficiency of hours in the open air; defects in ventilation and heating; uncleanly habits; and faults in dietary. The Committee suggest measures for the rectification of this alarming state of affairs, and urge the necessity for the early diagnosis of phthisis in asylum cases. They recommend the adoption of such means of prevention as—isolation of all phthisical cases, limiting the size of future asylums, checking overcrowding, increased day and night cubic space, reduction of the number of beds in dormitories, increased and more thorough natural ventilation per patient, the greatest care to prevent the spread of the disease by promiscuous spitting, and a careful supervision of dietary. But perhaps the most important suggestion is that properly constructed and suitable hospitals and sanatoria be provided and equipped with adequate and suitable surroundings for the isolation of these cases and their treatment on the most modern lines. And failing such special hospitals or sanatoria, it is recommended that temporary isolation hospitals or special wards and airing courts be set apart for this purpose. The matter is one of pressing importance, and we trust no time will be lost in facing the problem.

Notes on Current Topics.

Contract Practice in Cambridgeshire.

THE movement in favour of a modification of existing terms of club medical practice is bound to spread throughout the country. The conditions which obtained when practitioners methodically employed unqualified assistants, on whom devolved the major part of the work, have been altogether changed by recent events and the general rise in wages, corresponding to a similar rise in the cost of living, renders it necessary to reconsider the terms under which contract medical attendance has been carried on for the last half-century. The question has just entered upon an acute phase at Chatteris, Cambridgeshire, where the club doctors have asked that the terms be raised from four shillings per head per annum for adults and three shillings for children to six shillings and four shillings respectively. A "large and enthusiastic meeting," says the *Cambridgeshire Times*, was held last week to consider the matter, with the result that the majority voted against any departure from the old conditions, although they were willing to pay a fee of two shillings for the examination of candidates for membership and one shilling per tooth-extraction. It was pointed out how unreasonable it was to expect medical men to travel distances which might reach three miles over often impassable roads for the existing four shillings a year, but a motion in favour of the doctors' contention was defeated by an overwhelming majority. It remains to be seen whether the spirit of cohesion between medical men, which has certainly grown up within the last few years, will suffice to prevent any outsider coming in and frustrating this very legitimate movement. The general feeling in the profession is unquestionably favourable to concerted pressure being brought to bear to improve the conditions of medical practice all round, and we confidently believe that no member of the profession will deliberately reinforce the resistance of those who evince a determination to refuse even the most moderate concession in this direction.

The Cytology of the Blood in Malignant Disease.

IN seeking to bring light into the dark recesses of those processes which constitute "cancerous" disease every illuminant must be pressed into the service. It is natural, therefore, that pathologists should seek to find changes in the blood which might further advance in solving what, hitherto, has proved insoluble. And yet, in spite of much work, we are still asking: 'Has the mere presence of a malignant growth any direct influence upon the blood of the patient suffering from cancer?" and "Are the alterations found in the blood-cells in many cases of cancerous cachexia of a specific nature?" or "Is there any evidence to be obtained from the examination of the blood in cancer that can be considered of any diagnostic value?" Dr Cecil Price-Jones has sought to answer these questions in the recently issued first volume of the Reports from the Cancer Research Laboratories of the Middlesex Hospital. His conclusions, it must be at once admitted, are not such as to encourage much hope from this line of research. The results are very variable, and in no case can any single examination be regarded as of the slightest diagnostic value. Taking, however, a group of cases, it would seem that there is generally a gradual increase in the percentage of polymorphonuclear cells, associated with a corresponding diminution of lymphocytes; in other words, a gradual increase of granular leucocytes at the expense of the non-granular, and this quite independently of the presence or not of leucocytosis. Another feature which also is not by any means a constant one, but which occurs in a sufficient number of examinations to make it notable, is the increased percentage over the now accepted normal of the large mononuclear hyaline cells. The number of red cells and hæmoglobin are diminished in cachectic cases, and when there has been rapid or great loss of flesh. Poikilocytosis, and variability of red cell diameter, is another notable feature, and a condition which in many cases is observed in quite early stages, where red cell count, and hæmoglobin index and leucocyte percentage hardly vary from the normal.

DR. W. H. WELCH, Professor of Pathology in Johns Hopkins University, Baltimore, will deliver the Huxley Lecture this (Wednesday) afternoon, on "Immunity."

The Perils of Intoxication.

The man in the street, in spite of the general spread of ambulance knowledge, persists in treating drunkenness as a jocose and trifling matter. His hardihood is on a par with that of the American engineer who sits on the safety-valve of the boilers in order to get top speed out of an unfortunate steamer. As medical journalists are never tired of pointing out, an individual in a state of comatose intoxication is really exposed to peril and jeopardy of no slight degree. The main risk arises, naturally enough, from the fall of temperature induced in the later stages of acute alcoholic poisoning. It is one of the sad yet common tragedies of hospital life for such a patient to be carried into the wards insensible and to die a few days later from pneumonia without having regained consciousness. Had the dangers of drunkenness been even faintly realised by a certain photographer of Dudley, he would have been spared a serious error of judgment a few days ago, when a lady fell out of her chair on to the floor after having her photograph taken. Under the impression that the unfortunate woman was intoxicated he did not send for medical assistance until nearly three hours had elapsed. When the medical man arrived he found it to be a case of apoplexy, and the patient died shortly afterwards without regaining consciousness. The photographer is to be blamed, not because he failed to recognise apoplexy, although that would be known to any ambulance student of average intelligence, but because he did not know the necessity of medical aid to drunken persons. In any case, if he had called in a medical man he would have been relieved of a great amount of responsibility and subsequent trouble.

Pauper Lunatics and their Attendants.

There is reason to think, judging from reports that appear in the public newspapers from time to time, that the lunatic pauper service of the metropolis is in need of a thorough overhauling. The process of investigation applied by the Southwark Board of Guardians has resulted in considerable changes, from which the defects of the former system may pretty safely be inferred. Some time ago a complaint was made by a woman to the Local Government Board on the ground of the ill-treatment of her husband whilst an inmate of the lunatic ward at St. George's Workhouse, Southwark. The central authority referred the matter to the Workhouse Committee for inquiry and report. The subsequent report admitted that certain bruises complained of by the wife were sustained by her husband whilst in the lunatic ward, "but whether from his own violence or not is not quite clear." Nor was the origin of bruises found upon two other lunatic inmates any clearer. The Committee reported disobedience to orders on the part of one attendant, who had been requested to resign. Another attendant had left. The Committee were of opinion that the new attendants should have greater experience in the care of lunatics, and therefore recommended that those officers be non-resident, with wages at the rate of 32s. per week, rising to 35s. This is a step in the right direction, although the rate of wages is not high when the skilled and responsible nature of the services required is taken into consideration. It is to be hoped that the Whitehall authorities will insist on the Southwark Guardians providing a sufficient number of lunatic attendants.

When to Operate in Appendicitis.

The question of when to operate in appendicitis is still a moot point among surgeons. Hence the general practitioner who has advised a definite course, either of action or of inaction, is apt to find his opinion opposed to that of the consulting surgeon. In other words, no general rule has yet been established as to the best method of procedure in the interests of a patient suffering from active inflammation of the appendix. For all that the general trend of medical authority appears to be pointing every year more and more in the direction of immediate operation in all cases, no matter how acute the recurrence or the onset of symptoms in a first attack. There is much to be said in favour of this attitude when the comparative safety of modern abdominal surgery is taken into consideration. There can be no doubt that delay has been the cause of many more deaths from appendicitis than those that have followed upon early operative interference. At the recent Belgian Congress of Surgeons at Brussels the subject was ably discussed by Professor Sonnenberg, of Berlin. It is worthy of note as a sign of the times that most of the speakers at the subsequent discussion were in favour of immediate operation in all cases. As surgical experience accumulates, there is little doubt that this *questio vexata* will be settled in a definite and satisfactory manner. Other points of equal obscurity in relation to the malady have been cleared up with the precision and rapidity that characterises scientific surgery at the end of the nineteenth century.

Glanders and Rabies at the Cape.

The evils of war are far-reaching and disastrous, even when waged under modern civilised conditions. The three years' war in South Africa has been attended by the usual wholesale distribution of camp infections in the shape of dysentery and enteric fever. A fresh danger, moreover, has recently been added in the shape of glanders and rabies, which are reported to have been spread all over South Africa. The glanders is said to have been distributed through the sale of horses by the Remounts Department. The question naturally arises, first, how the Remounts Department came to have glandered horses in their possession, and, secondly, why such animals were sold by the Department. In any properly organised official department for the provision of horses for Army use we have no hesitation in saying that no animal should be approved until its freedom from glanders had been demonstrated by the Mallein test. The scandals in connection with the supply of horses to the British Army during the late campaign read like one of the romances written by the late lamented Baron Munchausen. That our soldiers' lives should have been sacrificed to the incompetence or corruption of contractors is serious enough without the additional loss that will be entailed by the wholesale distribution of glandered horses. In a young country it is a thousand times easier to introduce infection than to eradicate it later when administrative methods are more complete.

The Manchester Infirmary Muddle.

Cottonopolis occupies a foremost position in the mercantile world, but concerning the rebuilding of its antiquated infirmary it has long been conspicuous by its remarkable ineptitude. For a quarter of a century the question of providing an adequate institution for the care of Manchester's sick poor, and a suitable field for clinical instruction, has been discussed and nothing has resulted, as is clearly shown by our Manchester correspondent. The Board of Management have at last realised, what has been only too evident to most citizens for many a long day, that they are quite unfit to direct the affairs of a large hospital in accordance with modern requirements, and almost all the members have tendered their resignation. For years there has been warfare between the Board and the Trustees. A number of the leading Trustees have recently met and declared their determination to carry this troublesome matter to a reasonable conclusion. They have indicated their line of action by adopting the following resolution:—"That the object of the Committee be to recommend the election of a new Board in order to carry out the following policy: Not to permit rebuilding on Piccadilly site, and to build without delay at Stanley Grove, unless a better site is offered." We sincerely trust that Manchester men will lose no more time, but at once proceed to erect hospital buildings worthy of their city and its justly distinguished medical school.

A Popular View of Sanitary Science.

In the course of some articles which have just appeared in *The Times* on municipal trading the writer institutes a curious comparison between the administrative requirements of the Public Health Acts, and those of other municipal undertakings. He says, for instance, that it is absurd to expect "labourers, carriage-wheel greasers, and others of the same type," to pretend to manage such a costly undertaking as an electric lighting department, though "on questions of public health and similar phases of local government their judgment might be as good as that of anyone else." Obviously, even a sound lawyer might be at a loss to personally superintend an electric lighting plant, but municipal councillors are not expected to do anything of the kind. In the same way the average councillor would be very embarrassed if asked to advise as to the means to be employed to promote public health, or to apply them himself, but here again he is only required to obtain skilled advice and to authorise its application. Fully as much technical knowledge is required in the one case as in the other, and this careless remark merely shows what small importance outsiders attach to the most weighty problem of modern times, a problem which concerns interests far and away beyond that of a mere question of street lighting. Yet if municipal councillors cannot be trusted to administer the laws concerning the public health, what can they be trusted to do? Following the same line of argument the Public Health Service would be described as an unremunerative investment, one of the kind against which municipalities are warned. To the dispassionate observer it would seem that the supply of light and water and public convenience in the matter of street management are pre-eminently things which naturally fall into the municipal domain.

The Epidemic at Derby.

From the point of view of the clinical bacteriologist, the curious epidemic that has resulted from the eating of certain pork pies at Derby is more than usually interesting. The illness was regarded at first as a series of cases of ptomaine poisoning, but Professor Delépine's interim report shows that this is far from the truth, though the lay newspapers still disregard the correction. The fact is that it was an acute specific disease, parallel with typhoid fever in many points, and caused by a bacillus of the coli group. The infection was conveyed in the pork, which seems to have acted as the medium of a virulent culture of the organism, and the same organism has been isolated from the pork, from the spleen, blood, bile, and intestines of a fatal case of the disease, from the same parts of animals fed on the infected pork, and from the blood of animals inoculated with a pure culture. The case is completely established by a definite serum, reaction being given with the blood of other patients who partook of the pork pies, while no reaction took place with healthy or typhoid blood. How the pork was originally infected is not yet made clear. It was thought until recently that the coli group of bacteria were not actively pathogenic except in the occasional formation of pus, but lately, as we have noticed, several cases of so-called "paratyphoid" fever have been traced to their action, and now we have to add an acute disease of a very dangerous type.

The Illness of the Marquis of Salisbury.

We learn that the Marquis of Salisbury has so far improved that his removal from Lucerne, it is hoped, may shortly be practicable. The venerable statesman has suffered for years from intestinal paresis, the effects whereof have been mitigated by massage and appropriate measures. The condition is one which entails an ever-present risk of intestinal obstruction, with its concomitant dangers. The advanced age and obesity of the patient add to the difficulty of maintaining the functions in a satisfactory state of activity, hence the anxiety which is felt at the slightest irregularity.

The Reported Scarlet Fever Cure.

The imagination of the newspaper reading world has been raised more or less to fever pitch by the announced discovery of a serum cure for scarlet fever. So far as can be gathered the rumour has arisen from the premature publication of some therapeutic investigations and experiments carried out by Dr. Moser, Assistant Physician to the St. Anne's Hospital for Children in Vienna. A subject of the kind can be solved only as the result of prolonged and extended scientific research of a most patient and thorough character. That the public newspapers should get hold of special information of the kind in its imperfect stages is perhaps hardly to be wondered at when we consider the accessibility and openness of medical journals and the ubiquitous curiosity of the modern lay journalist in search of sensational "copy." In the present case the mischief of premature publication has been done, and it is to be presumed that Dr. Moser is the unhappy victim of the lurid publicity which the newspaper press apparently delights in bestowing upon bashful and reluctant professors. That a cure for scarlet fever will one day be found is a firmly-grounded canon of belief with most medical men. That the specific remedy will cure in the form of a curative serum is another article of almost, if not quite, equally accepted faith. It would be a thousand pities, however, were the search for this holy grail sullied by the faintest breath of suspicion that personal aggrandisement formed part of the prize awaiting the hero of the fight.

Coroners and Unqualified Practitioners.

The defective state of the Medical Acts with regard to the control of irregular medical practice renders it most desirable for the profession to keep itself informed of all safeguards that may be in any degree available. Of such regulating agencies the chief, undoubtedly, are in the hands of the registrars of deaths and of the coroners. These public officials in the discharge of their duties have abundant opportunities of calling attention to the proceedings of irregular medical practitioners. In the case of the registrars of deaths it is to be feared that they are not in all cases impressed with an adequate view of their duty and responsibility in the matter of certificates. At the same time it may be freely admitted that of late years great improvement has taken place in the official attitude towards questionable certificates. Coroners have done an immense amount of service to the community by calling attention to the evils of unqualified practice. Quite recently a pretender of that kidney has been prosecuted at the instance of a coroner for perjury committed at an inquest. A medical man is not entitled to give evidence at an inquest unless he is registered as well as medically qualified. In the case mentioned he appears to have been neither the one nor the other. It may perhaps be hinted that coroners would do well to ascertain in every instance whether the name of a medical witness actually appears upon the *Register*.

The Personation Peril.

An extraordinary case of alleged personation now engaging the attention of a London magistrate illustrates the glaring defects of our present system of medical registration. A man named Herring stands accused of perjury for evidence given at an inquest in which he posed as a qualified and registered medical practitioner. His name is not to be found on the *Register*, neither is that of either of the gentlemen under whose names he practised, at any rate, in the London list. Should the allegations of the prosecution be true the accused will have achieved a record in the direction of impudent personation. There appears to be no doubt that he carried on practice in a suburb of the Metropolis under the united names of Hoffmeister and Dobie. As the matter is still *sub judice*, it is not permissible at present to exceed a brief statement of facts. At the same time we feel justified in drawing attention to another point brought out in evidence, namely, the attitude of a neighbouring general practitioner who a year or more ago refused to meet the accused in consultation. Presumably his refusal was based upon the knowledge of the illegal nature of Herring's proceedings, which he apparently took no steps to expose. Perhaps some more satisfactory explanation may be forthcoming, for it is impossible to conceive that immediate action would not have been taken by the Medical Defence Union or other responsible body had their attention been called to the matter. In any case, whether the present prosecution be established or not, the possibility of such an occurrence as that alleged to have taken place more than emphasises the ridiculous nature of a professional registration which is purely voluntary.

A Latter-day Faith Cure.

The saving grace of a little faith is nowadays a well-recognised weapon in the therapeutic armoury. It enters largely into the framework of not a few methods advocated by followers of orthodox medicine, to say nothing of the multifarious devices adopted by the quack and the charlatan. Nor, in all sober seriousness, would it be possible for the candid student of scientific medicine to exclude the psychological element from his reckoning. In faith, and faith alone, lies the value of the Mattei so-called "cure" of cancer, inasmuch as the matter-of-fact chemical analysts have reported that the remedies consist of water—"only that and nothing more." Yet many worthy folk—among them that gifted journalist, Mr. Stead — have been found to maintain the positive value of the Mattei remedies against all and sundry. A similar faith in plain water appears to be shared by certain of Mr. Stead's countrymen, if we may judge from the recent revelations in a London police-court. The Aldgate pump, as all the world knows, is a famous, and, indeed, historical feature of the East End, where its waters have long enjoyed a reputation for healing virtue. To this day people come from a distance, especially on Sunday morning, and carry away this precious medicinal water in bottles. It appears, however, that some twenty years ago the well was closed, for reasons that are sufficiently obvious, and ever since the pump has been fed by a tank, which has in turn been supplied by water from the New River. This incident affords an amusing and delightful illustration of the psychology of "faith" cures.

The Irish Giant.

The skeleton of the Irish Giant, which was shown by Professor Cunningham, F.R.S., at the recent meeting of the British Association for the Advancement of Science in Belfast, is a sadly convincing proof of the inaccuracy of the old folk-lore tales of magnificent giants. Cornelius Magrath, who, in his life, was "the only representative in the world of the ancient and magnificent giants" of Ireland, and who possessed "the truest and best proportioned figure ever seen," has after his death been pronounced to have been the result of acromegaly, and, according to Professor Cunningham, nearly blind, knock-kneed, and of a decrepit appearance. The Irish Giant was 7ft. 5in. in height; he was born in Tipperary in 1736, and died in 1760, after having been exhibited in most of the important cities of Europe. Apparently his excessive height was due to the effect of acromegaly occurring before the consolidation of the skeleton, whereas the more common form of this disease usually occurs after such consolidation has taken place, and when, consequently, no increase in stature results.

The Etiology of Salmon Disease.

A most interesting paper was read at the recent meeting of the British Science Association by Mr. J. Hume Patterson, Assistant Bacteriologist to the Corporation of Glasgow, on the cause of the so-called salmon disease. Up to the present investigators into the condition have considered it to be due to invasion by the *fungus saprolegnia ferax*. Mr. Patterson, on the other hand, has come to the conclusion that this is not so, but that the disease is due to a liquefying bacillus, which he terms the *bacillus salmo pestis*, and that the notion that the former fungus was the cause arose from the fact that the latter will only grow on salmon previously infected by the bacillus and consequently are only met with in cases of salmon disease. Mr. Patterson's experiments also proved that salmon disease was not contracted when the skin of the fish was in a healthy state, but that infection could readily occur if the skin had become rubbed or scratched by scraping against sand or rocks. All fish related to salmon were more susceptible to the disease than others of a different genus. Professor Howes, the President of the Section, in discussing Mr. Patterson's paper, pointed out that his results might have an interest for investigators into the causes of cancer, inasmuch as in that disease there was an antecedent morbid state associated with a pathological organism. This is, however, equally the case in the majority of morbid conditions, as there must always be a suitable soil as well as the seed of the disease. Consequently, unless Mr. Patterson's researches elucidate some more important resemblance to the etiology of cancer, we fear they will advance that problem but little.

Bad Language in the Streets.

Unquestionably it would be an excellent thing if means could be found to restrict the use of obscene language in public thoroughfares, and we do not despair of progress in this direction. Unfortunately such language is made use of to a deplorable extent by mere children, and this aspect of the question was recently discussed by the Liverpool magistrates, who decided to instruct the Chief Constable to enforce more strictly the provisions of the Liverpool Improvement Act, "with the object of bringing to the better knowledge of such children the meaning of the words they so thoughtlessly employ." With every respect for the worthy intention of the magistrates we think the best way of bringing the meaning home to the delinquents would be by the routine application of the birch. Is it intended that the Chief Constable shall explain the meaning of the terms to the children, or is he to depute the function to a subordinate official? In any event the task will be a very delicate one—one moreover, which may fall short of the desired result.

The Health of Mr. Roosevelt.

There appears to be singular lack of precision in the information which reaches the press concerning the health of the President of the United States. The truth is that the injury which Mr. Roosevelt received in the carriage accident a few weeks since had for effect to determine some localised periosteitis of the tibia, which culminated, as is so often the case, in suppuration. At first he ignored the pain and swelling, and it was not until there was a rise of temperature that he allowed his medical advisers to intervene. By that time the periosteum had been stripped off the bone for a short distance, and, as recent events show, the interference thus caused with the local blood supply led to necrosis. The further course of the troublesome injury will depend upon the measures adopted. If the necrosed bone be left to exfoliate this process will, of course, take some time, leaving the patient exposed to the risk of septic complications, against which the strictest precautions are not always effectual. It may be, however, that his medical advisers will persuade him to allow the piece of bone to be removed surgically, in which case there is no obvious reason why cure should not be rapid. We may be sure that the treatment which the President receives will be that indicated by the special circumstances of the case, but while a lesion of this kind can never be described as absolutely without risk, there is in reality little ground for anxiety.

The General Medical Council Election.

The polling for the election of a direct representative on the General Medical Council has resulted in the return of Sir Victor Horsley by a majority of 4,567, the total number of votes in his favour being 7,672, as compared with 3,105 for Mr. Joseph Smith. We congratulate Sir Victor Horsley on his re-election, which makes for efficiency and reform. At the same time the measure of support accorded to Mr. Joseph Smith marks him out as a "likely" candidate at a future election, when electors will not have to choose between him and Sir Victor Horsley.

PERSONAL.

Mr. F. Danford Thomas has been appointed Deputy Coroner for the City of London.

Colonel W. Briggs Allin, R.A.M.C., has been appointed Principal Medical Officer of Cape Colony.

Professor Sims Woodhead assisted at the opening ceremony of the new Bacteriological Institute at Copenhagen on September 9th.

Dr. David Ferrier, F.R.S., will deliver the Harveian oration before the Royal College of Physicians in London on October 18th, at 4 p.m.

Mr. C. F. Myers Ward, Professor of Physiology at University College, Sheffield, has been appointed Lecturer in Physiology at the Charing Cross Hospital School of Medicine.

Professor Erb, of Heidelberg, will be the guest of the evening at a dinner which is announced to be given at the Trocadero Restaurant on Saturday, October 11th, with Dr. Donald W. C. Hood in the chair.

Lieutenant-Colonel Clery, R.A.M.C., formerly Senior Medical Officer at Cambridge Hospital, Aldershot, has been appointed Principal Medical Officer in the Transvaal and Orange River Colony.

Miss Emma Moleo, a Jewish lady-doctor of Tunis, has started practice in that city, where she will practise in association with Miss Gordon, who for some years past has been the only lady-doctor there.

Dr. Priestley, the Medical Officer of Health for Lambeth, has been voted an honorarium of a hundred guineas in recognition of his services in connection with the epidemic of small-pox in that borough.

A memorial to the memory of the late Dr. D. Ramsey, of Ringstead, was unveiled last week "in testimony of the genial and sympathetic manner in which, for thirteen years, he had skilfully discharged the duties of his calling."

Mr. Rickard Lloyd, President of the West London Medico-Chirurgical Society, will read the opening address on "The Field of View of the Anæsthetist" at the Society's meeting on Friday, October 3rd, at the West London Hospital.

Mr. Edmund Owen will be presented with the testimonial subscribed by past and present students of St. Mary's Hospital on the occasion of the annual dinner which will be held at the Whitehall Rooms, Hotel Metropole, on Friday next (October 3rd).

Dr. Ernest White, the resident physician and superintendent of the City of London Asylum, and the Professor of Psychological Medicine at King's College, London, has been elected the president of the Medico-Psychological Association of Great Britain and Ireland for 1903-4.

Dr. Lionel P. Shadbolt, of Liverpool, distinguished himself a few days since by an act of gallantry which deserves mention. He jumped overboard from the ferry-steamer after a passenger who had fallen overboard, and, in spite of a strong ebb-tide, he succeeded in effecting his rescue, thanks to his prowess as a swimmer. The act is one which merits public recognition.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

MANCHESTER.

[from our own correspondent.]

The Infirmary Question.

It will be remembered that a few weeks ago the Board of Management submitted to the Trustees a scheme for rebuilding the Manchester Royal Infirmary on the present site in the centre of the town; and further, that this scheme was thrown out by a great majority of the Trustees. At a meeting held last week it was announced that all except two members of the Board have resigned. The general policy of the Board, apart from the rebuilding question, has always met with fairly general approval, and it would, of course, be very difficult for an entirely new body of men to take up the management of the institution. It is, therefore, understood that a number of those who have resigned will allow themselves to be re-elected by the Trustees, together with some "new blood." The fresh Board so constituted will probably at once proceed with a scheme for a new infirmary on a new site some little distance from the centre of the town and near to the Owens College.

It is obvious that some active work must have been done among the Trustees of late to bring about such results as the defeat of the Board and the throwing out of its scheme. The party who were able to do this will doubtless be ready with some fairly definite proposals. It is certain that these will not include the demand from the Corporation of £400,000 for the site of the present Infirmary, nor the sale of the site to anyone who might be willing to buy it for business purposes. Something more feasible than either of these ideas can be devised by those business-like Trustees who are taking the matter in hand. Some of these gentlemen, by the way, are not perfectly contented with the present management of the charity, and the new brooms on the Board may find room for some sweeping in the old building before they begin the erection of a new one. They will be supported by the representatives of the Medical Board, who now sit on the Board of Management.

BELFAST.

[from our own correspondent.]

Consumption in Belfast.

Public attention in this city is happily being directed at present to the high death-rate from tuberculosis, and a vigorous controversy regarding it is going on in the daily press. This controversy rose from a paper read at the late meeting of the British Association in Belfast by Mr. Robert Brown, the Hon. Sec. of the local branch of the Anti-Tuberculosis Society.

The Medical Superintendent Officer of Health, Dr. Whitaker, has given his views on the subject. He pointed out that municipal authorities possess no power to enforce compulsory notification of the disease, and in only one large town—Liverpool—is voluntary notification adopted on an extensive scale. After referring to the death-rates in Liverpool, Manchester, Bradford, Salford, Preston, Glasgow, and Paisley, he declared that, all things considered, he was astonished that the death-rate from consumption in Belfast was not higher than it was. He attributed the prevalence of consumption to the situation of the city, and said "we can do nothing in Belfast till we get compulsory notification." When asked if he agreed that the higher death-rate in Belfast was due to defective sanitary arrangements, and the lower mortality in English and Scotch towns was to be attributed to superior sanitation, he replied, "I do not. The difference in the death-rate, in my opinion, is to be accounted for by the different climatic conditions and conditions of employment among a very large section of our population Among the conditions he puts the fewness of the holidays taken by the working classes in Belfast, and, as regards Ireland generally, the fact that the people are neither so well fed nor well clothed as in England and Scotland. Mr. Brown has promised a further paper in which he will give fuller particulars as to the shortcomings of Belfast, which he did not wish to emphasise before our visitors, so no doubt more will be heard of the matter. Whichever may prove right, the impartial man cannot but rejoice that public attention should be called to this great evil.

North of Ireland Branch of the British Medical Association.

The new constitution of the Association has rendered necessary great changes in its branches, and a circular has just been issued to the members of this Branch giving particulars of the proposed changes in it. The plan, in brief outline, is as follows:—The Branch will consist of the province of Ulster, and will be known as the Ulster Branch. The four general meetings each year will be held, two in Belfast, one in Derry, and one elsewhere. Eight divisions of the Branch will be formed; such as do not rise to the height of their opportunities will be attached to a neighbouring division.

Death under Anæsthesia.

An inquest was held last week by Dr. G. Danford Thomas, at Hampstead, on the body of a young woman who died while being operated upon for appendicitis. The anæsthetic used was a mixture of chloroform and ether, and its administration had ceased fifteen minutes before the collapse of the patient. This appears to be one of those cases in which death merely coincides with anæsthesia without there being any relationship of cause and effect. A verdict of death by misadventure was returned.

Waterford County and City Infirmary.

At the half yearly meeting of the Governors of the Waterford County and City Infirmary, held on Friday, September 26th, 1902, Dr. T. A. Kelleher's report was read. During the half-year 241 patients were admitted, of whom 139 were surgical cases and 82 medical ones. Of the surgical cases 25 were admitted as accidents, and 17 were admitted as urgent cases. One hundred and ten surgical cases were discharged as cured, 15 were relieved, and 3 died.

Death under Chloroform.

A domestic servant, æt. 24, died from the effects of chloroform, administered at the Royal Albert Hospital, Devonport. At the inquest it was stated that half-an-ounce of chloroform was administered in a quarter of an hour, and no further explanation of the collapse was needed. An exonerating verdict was returned.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

DR. RAINSBURY'S CASE.

To the Editor of The Medical Press and Circular.

Sir,—Referring to the appeal which you kindly permitted me to make through the medium of The Medical Press and Circular, I beg to enclose a list of the subscribers to the fund. Dr. Rainsbury and the Council of the Midland Medical Union desire me to express their thanks for the generous response which has been made to the appeal.

The amount of the judgment and costs is £182 6s. 2d. The donations already received amount to £55 12s. 3d.

It is hoped that further contributions will be received towards the balance of £126 13s. 11d.

Will you kindly insert the list of subscribers in the next issue of The Medical Press and Circular?

I am, Sir, yours truly,
George S. O'Rorke,
Secretary, Midland Medical Union.
Midland Medical Union,
Nottingham, September 24th, 1902.

	£	s.	d.
Dr. H. Mickie, Nottingham	1	1	0
Dr E. H. Houfton, Shirebrook	1	1	0
Mr. J. G. Shea, Chesterfield	1	1	0
Dr. W. B. Ransom, Nottingham	3	3	0
Dr. H. Hanford, Nottingham	1	1	0
Dr. W. Windley, Birmingham	0	10	0
Dr. G. S. Foulds, Nottingham	0	10	6
Dr. Alex. Gregor, Sutton-on-Trent	0	5	0
Dr C. Westbrook, Retford	0	10	0
Mr. R. Howson, Nottingham	0	10	6
Mr. W. H. Coates, Hucknall Torkard ...	0	10	6
Dr. W. H. Hill, Basford, Notts	1	1	0
Mr. E. Simpson, Epperstone	0	5	0
Dr. R. O. B. Holland, Matlock Bath ...	1	1	0
Dr. E. B. Ffennell, Nuncargate	1	1	0
Mr. W. G Laws Nottingham	0	10	0
Dr. F. R. Cassidi, Derby	2	2	0
Dr. W. J. Le Grand, South Normanton ...	0	5	0
Mr. J. K. Goodall, Chesterfield	1	1	0
Dr. C. E Cornwall, Sneinton	1	1	0
Mr. W. C. Leitch, Langwith	0	10	0
Mr. W. E. Wyllys, Great Yarmouth ...	1	1	0
Mr E. V. Eames, Heanor	1	1	0
Mr. J. A. Benson, Ashover	1	1	0
Mr. A. Wilson Shea, Chesterfield	0	10	0
Dr. Walter Hunter, Nottingham	1	0	0
Dr. W. Cecil Sharpe, Darley Dale	0	10	6
Dr. A. Fulton, Nottingham	1	1	0
Dr. W. Benthall, Derby	0	10	6
Mr. S. W. C. Warneford, Darley Dale	0	10	6
Mr. G. A. Ferraby, Nottingham	0	10	0
Dr. John Knox, Bakewell	0	10	0
Dr. McClure, Chesterfield	1	1	0
Mr. H. W. Smith, Mansfield	1	1	0
Mr. C. J. Palmer, Mansfield Woodhouse ...	1	1	0
Dr. A. Court, Chesterfield	0	10	6
Dr. A. Cox, Gateshead..	0	5	0
Mr. V. E. Sutcliffe, Chesterfield	1	1	0
Dr. J. H. Blight, Chesterfield	1	0	0
Dr. F. McKenzie, East Kirkby	0	10	0
Mr. W. W. Robinson, Chesterfield	0	10	0
Dr. R. A. Barber, Dronfield	0	10	6
Dr. G. Booth, Chesterfield	1	1	0
Mr. T. Geraty, Nottingham	1	1	0
Mr. A. Chawner, Claycross	1	1	0
Mr. Stamford and Mr. Marriott, Tibshelf ...	1	1	0
Mr. J H Cox, Nottingham	1	1	0
Dr. W. Duncan, Claycross	0	10	0
Dr. J. O Brookhouse, Nottingham	1	1	0
Dr. T. Tate, Mansfield..	5	5	0
Dr. R. Irvine, Hucknall-Huthwaite	1	1	0
Dr. M. W. Oldham, Mansfield	1	1	0
Dr. F. R. Mutch, Nottingham	1	1	0
Dr. P. Gandin, Plaistow	0	5	0
Dr. G. Bruce, Edwinstowe	1	1	0
"Anonymous," Buxton	0	1	9
Mr. W. B. Broskery, Eckington	0	10	6
Dr. W. T. Rowe, Nottingham	0	10	0
Dr. Albert Green, Chesterfield	1	1	0
County of Durham Medical Union ...	2	2	0
	£55	12	3

MALARIA AND TUBERCULOSIS.

To the Editor of The Medical Press and Circular.

Sir,—The interesting article in the last issue of The Medical Press and Circular on the Anti-Mosquito Campaign brings to my mind another interesting paper published so long ago as 1840, "On the Influence of Malarial Atmosphere in the Prevention and Cure of Phthisis Pulmonalis," in which paper the writer (Horace Green, of New York) instances cases of phthisis "in an almost hopeless condition which had recovered on being sent to reside for some time at Whitehall, in Washington, Co. New York."

Of course the writer was not aware of the true cause of malarial fever, and concluded such was due altogether to "atmospheric influence" and the marshy surroundings of that town. He states "it is bounded on one side by low, marshy grounds, which are filled with pools of stagnant water, and from which during the summer months malarious exhalations are constantly arising, producing in the vicinity an abundance of cases of intermittent fever, *yet consumption is seldom or never known at Whitehall*" (italics mine).

As the true cause of malarial fever has now been discovered, it has struck me it would be an interesting experiment (if nothing else) to inoculate phthisical patients with blood taken from a case of malaria at height of the fever; or test the effect of mosquito bite, even at the risk of producing ague (which, of course, could at once be combated by quinine), and so endeavour to lessen the fearful mortality from phthisis, which is stated to cost in victims in United Kingdom alone 42,000 yearly, and in money value upwards of £1,000,000 per annum; the loss in wage-earning powers estimated at from ten to twelve millions annually.

I am, Sir, yours truly,
Alexander Duke.

Obituary.

MR. HENRY WRIGHT, M.R.C.S., J.P., OF SCARBOROUGH.

We regret to announce the sudden death from heart failure on Monday of this gentleman, who was the oldest practitioner residing in Scarborough. The event came as a surprise, and caused profound grief to many of the townsfolk, by whom he was held in great esteem. For the past fourteen years he had been a Justice of the Peace for the Borough, and on many occasions his medical knowledge was of service in cases before the Court, which he attended on the morning of his death. While seated in his chair at home in the evening he suddenly became unconscious, and passed peaceably away before medical aid could arrive, at the age of seventy-six.

DON FEDERICO RUBIO Y GALLI.

The death is announced of Spain's most distinguished surgeon, Don Federico Rubio y Galli, at the advanced age of seventy-five years, at Madrid. He was a member of the Academy of Medicine of Madrid since 1874, about which time he was made an Honorary Fellow of the Royal College of Surgeons, London. He performed his first ovariotomy in 1860, his first hysterectomy in 1861, and ablated the larynx in 1878. He was a consistent and able advocate of aseptic surgery and open-air treatment of patients.

MR. A. G. FIELD, F.R.C.S., WALLINGFORD.

We regret to announce the death of Mr. Alfred George Field, F.R.C.S., a well-known surgeon in Oxfordshire and Berkshire, who died on Monday at Quisisana, Benson, Wallingford, at the age of eighty-two. He had been surgeon of St. Mary's Hospital, Brighton, of the Royal Sea Bathing Infirmary, and of Blenheim Dispensary, and was a Fellow of the Royal Medical and Chirurgical Society. He had contributed several interesting and important articles to the professional journals.

DR. ARTHUR B. BLACKER, LONDON.

We regret to announce the death of Mr. Arthur Barry Blacker, M.D.Durh., an authority on X-rays, at 16, West Halkin Street, Belgrave Square, at the age of forty. He was a son of the late Rev. Maxwell Blacker, and studied at the Medical School of St. Thomas's Hospital. In 1886 he became a licentiate of the Royal College of Physicians, London. Four years later he took the M.D. degree at Durham, and in 1891 became a member of the Apothecaries' Society. Dr. Blacker had been assistant electrician at St. Bartholomew's Hospital, house surgeon at the West London Hospital and at the Belgrave Hospital for Children, assistant demonstrator of anatomy at the University of Durham, physician to the SS. Paul and Barnabas Dispensary, and resident physician at Mena House, Cairo. At the time of his death he was superintendent of the X-ray department of St. Thomas's Hospital, and the Hospital for Consumption, Brompton, and senior medical officer of the Royal Pimlico Dispensary. Dr. Blacker had written extensively on light as a therapeutic agent.

Pass Lists.

University of Durham.—Faculty of Medicine.

The following candidates have passed the First Examination for the Degree of Bachelor in Medicine during September:—

1. Elementary Anatomy and Biology, Chemistry and Physics: Frederick Charles Pybus, with second class honours. Pass List: Horsley Drummond, Walter Nicholas Jones, Hector Graham Gordon Mackenzie, M.A., George Robert Philipson, David Ranken.

2. Elementary Anatomy and Biology: Helen Young Campbell, Lewis Augustus Clutterbuck, L.R.C.P. and S. Ed., L.R.C.P.I., Hamilton Drummond, Camilla Lucy Heckrath, Florence Barrie Lambert, Jessie Jean Martin Morton, Jessie Margaret Murray, Norman Spedding, Eric Frushard Waddington.

3. Chemistry and Physics: Vincent Edgar Badcock, Thomas Henry Bishop, M.R.C.S., L.R.C.P., George Edward Peckett Davis, George Denholm, Neville Avory Eddlestone, John Charles Norman, Geoffrey Pybus, Richard Woodward Swayne, Lionel Langford Westrope, Frank Whitby, Thomas Leathard Wormald.

The following candidates passed the Second Examination for the Degree of Bachelor in Medicine:—Anatomy, Physiology, and Materia Medica: James Glenny Gibb, with first class honours. Honours, second class: Lillie Johnson, B.Sc., William Edward Hopkins, Arthur Alan Miller, M.R.C.S., L.R.C.P., Francis Henry Moxon. Pass List: Arthur Edward Clayton, James Henry Cooke, B.Litt., William Cowden, Hugh Boyd Cunningham, William Ernest Falconar, Arthur Beresford Jones, Cyril Claude Lavington, William Ernest Craven Lunn, Ernest Martin, Charles Duncan Relton, Oswin Shields, M.R.C.S., L.R.C.P., Richard Geoffrey Shaw Simpson, Frank Tomisman Simpson, Edward Tate, Tys Visser.

The following candidates have passed the Third Examination for the Degree of Bachelor in Medicine:—James Alexander Bennett, Henry Mounsey Braithwaite, Llewelyn Alfred Henry Bulkeley, Herbert Christal, Edgar Fletcher Edmunds, Arthur Henry Fullerton, Albert James Gilbertson, Marshall Haver, Norman Haliburton Hume, Sophia Bangham Jackson, John George Ogilby Hugh Lane, M.R.C.S., L.R.C.P., Thomas William Maddison, Aurelius Victor Maybury, Arthur Alan Miller, M.R.C.S., L.R.C.P., Stanley Robson, William Tait Sewell, Arthur Lewin Sheppard, Oswin Shields, M.R.C.S., L.R.C.P., Frederick James Strachan, Samuel George Webb, Hermann Wolfe.

Society of Apothecaries of London.

The following candidates passed during September in:—

Surgery: E. W. C. Bradfield (Section II.), D. Cotes-Preedy (Section I.), B. C. Ghosh (Section I.), E. H. Griffin (Sections I. and II.), A. T. Harvey, M. E. Martin (Sections I. and II.), E. J. Miller, G. B. S. Soper (Section I.).

Medicine: E. W. C. Bradfield (Sections I. and II.), C. R. Bradley (Section I.), J. C. S. Dunn, I. Griffith (Section II.), M. E. Martin (Section II.), C. C. Morgan (Section II.).

Forensic Medicine: E. W. C. Bradfield, C. R. Bradley, K. Heanley, C. C. Morgan, P. J. Pagonis.

Midwifery: S. Bentley, P. S. Cooke, B. C. Ghosh, H. Jacques.

The L.S.A. diploma of the Society was granted to the following candidates, entitling them to practise medicine, surgery, and midwifery:—E. W. C. Bradfield, J. C. S. Dunn, A. T. Harvey, M. E. Martin, E. J. Miller, and C. C. Morgan.

Notices to Correspondents, Short Letters, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

A STATUE TO DR. CRAWFORD W. LONG, OF ANÆSTHESIA FAME.

To the Editor of The Medical Press and Circular.

Sir,—As Crawford Williamson Long, the discoverer of general anæsthesia, was the grandson of an Ulsterman who emigrated to America in the eighteenth century, I think all Irishmen will be both interested and gratified by reading the following announcement, for a copy of which I am indebted to my friend, Dr. Landon P. Edwards, of Richmond, Virginia:—"In accordance with a special Act of the Legislature of the Commonwealth of Georgia, a statue of Dr. Crawford Williamson Long, the discoverer of general anæsthesia, will be given the first place in the Statuary Hall at Washington D.C., U.S.A."

I am, Sir, yours truly,

George Foy.

J. B. G.—We have answered your question to the best of our ability and we have nothing further to add.

A MAGISTRATE'S COURT FOR CHILDREN.

A correspondent writes:—The ordinary police-court is obviously a most unsuitable tribunal to deal with children charged with minor offences. The environment is degrading, and the average magistrate is hardly suited to deal with juvenile offenders, who require special knowledge and special methods of dealing with them. We might with advantage follow the example set at Boston, U.S A., in instituting a special court, to which all prisoners under sixteen years of age are sent.

Dr. M. R.—We cannot make any promise until we have been afforded an opportunity of inspecting the MS. We will undertake to return it if not deemed suitable.

THE SCIENTIFIC ASPECTS OF THE BACON-SHAKESPEARE CONTROVERSY.

Dr. John Knott sends us a reply to the criticism of our correspondent, George Stronach, of Edinburgh, which, though of great literary interest, is of such extreme length that we are unable to grant the space necessary for its insertion, especially as the subject is extra-medical. If the writer can compress his reply to about a column (instead of seven columns, as at present) we shall be pleased to place this space at his disposal.

Dr. J. R.—The subject is an important one, and we hope to have space for your communication and an editorial thereon in our next.

Meetings of the Societies, &c.

Friday, October 3rd.

West London Medico-Chirurgical Society.—8.30 p.m. Twenty-first Session. Opening Meeting. The Presidential Address. Mr. Rickard Lloyd: "The Field of View of the Anæsthetist."

Tuesday, October 7th.

Gresham College (Basinghall Street, E.C.).—6 p.m. Dr. E. Symes Thompson, M.D., F.R.C.P., Gresham Professor of Medicine, will commence a course of four popular lectures "On Food," to be continued on each succeeding evening at the same time and place.

Thursday, October 9th.

British Gynæcological Society (20, Hanover Square).—8 p.m. Specimens will be shown by Professor J. W. Taylor, Mr. Bowreman Jessett, and Dr. Macnaughton-Jones. Mr. Jessett will read a paper on "Some Complications arising subsequently to Cœliotomy." Professor Taylor will read a short communication on a case of "Uterus Bicornis with Rudimentary Right Horn."

Appointments.

Alexander, J. D., M.B., B.Ch., B.A.O.Dubl., Certifying Surgeon under the Factory Act for the Porthcawl District of Glamorgan.

Crowther-Smith, S. F., M.B.Lond., Certifying Surgeon under the Factory Act for the Liss District of Hants.

Dods, J. E., M B., B.S.Edin., Medical Officer at Brisbane, Queensland, Australia; Health Officer for the Port of Brisbane; and Visiting Surgeon to the Prisons at Brisbane.

Grant, J. W. G., L.R.C.P.Lond., M.R.C.S., Certifying Surgeon under the Factory Act for the Llanwrtyd Wells District of Brecon county.

Haycock, H E., L.R.C.P.Edin., M.R.C S, Certifying Surgeon under the Factory Act for the Alfreton District of Derby county.

McDonald, H., M.B., B.S.Dubl., Certifying Surgeon under the Factory Act for the Portaferry District of Co. Down.

Macnicol, R. R., M.B., B.S.Glasg., Certifying Surgeon under the Factory Act for the Taynuilt District of Argyllshire.

Morrison, J. T. J., M.A.Cantab., M.Sc.Birm., F.R.C.S.Eng., Honorary Surgeon to the Queen's Hospital, Birmingham.

Ratcliff-Gaylard, J., M.D.Brux., L.R.C.P. and S.Edin., L.F.P.S. Glasg., Medical Officer and Public Vaccinator for the St. Clement District by the Truro Board of Guardians.

Sheen, William. M.S., M.D.Lond., F.R.C.S.Eng., Honorary Surgeon to the *Hamadryad* Seamen's Hospital, Cardiff.

Soltau, A. B., M.B.Lond., Medical Officer to the Plymouth Public Dispensary.

Spencer, W., L.R.C.P. and S.Edin., Certifying Surgeon under the Factory Act for the Bolsover District of Derbyshire.

Vacancies.

County Asylum, Chester.—Third Assistant Medical Officer. Salary £160 per annum, with board (no liquors), lodging, and washing. Applications to Dr. Lawrence, County Asylum, Chester.

Croydon Union Infirmary, Mayday Road, Croydon.—Resident Assistant Medical Superintendent and Dispenser. Salary £120 per annum, increasing to £150, with apartments, rations, and washing. Application forms of the Clerk to the Guardians.

Down District Lunatic Asylum.—Junior Assistant Medical Officer, not exceeding 32 years of age and doubly qualified. Salary £100, with furnished apartments, board, washing, and attendance. (See Advt.)

Great Northern Central Hospital, Holloway.—Assistant Anæsthetist. Honorarium 10 guineas per annum. Also a Pathologist and Curator of the Museum. Salary 50 guineas per annum. Fuller particulars may be obtained on application to L. H. Glenton-Kerr, Secretary.

Guildford, Royal Surrey County Hospital.—Resident House Surgeon. Salary £100, with board, residence, and laundry. Applications to the Hon. Secretary.

Hamlet of Mile-End Old Town.—Assistant Medical Officer, unmarried. Salary £150 per annum, with board, lodging, and laundry. Particulars on application to the Clerk to the Guardians.

Hospital for Consumption and Diseases of the Chest, Brompton.—Assistant Resident Medical Officer for six months. Salary £100 per annum, with board and residence. Also Resident House Physician for six months. Honorarium £25. Applications to the Secretary.

Monaghan Union.—Scotstown Dispensary District.—Medical Officer. Salary £120 per annum, with usual Vaccination and Registration Fees. The gentleman elected will also act as Medical Officer of Health at a salary of £15 per annum. Immediate application to Samuel Mitchell, Clerk of Union. (See Advt.)

Monmouthshire Asylum, Abergavenny.—Junior Assistant Medical Officer (Male). Salary £150 per annum, with board, lodging, and washing. Applications to the Medical Superintendent.

New Ross Union.—Medical Officer. Salary £150 per annum, together with usual Vaccination Fees. The gentleman elected will also act as Medical Officer of Health at a salary of £15 per annum. Applications to P. A. Pope, Clerk of Union. (See Advt.)

Royal Hants County Hospital, Winchester.—House Physician. Salary £65 per annum, rising to £75, with board, residence, &c. Applications to W. M. Wilcox, Secretary.

The General Infirmary at Gloucester and the Gloucestershire Eye Institution.—House Surgeoncy. Salary £100 per annum, with board, lodging, and washing. Applications to the Secretary.

Births.

Brodie.—On Sept. 23rd, at The Hutch, Sandown, the wife of F. Carden Brodie, M.B., of a daughter (stillborn).

Eames.—On Sept. 20th at Lambecroft, Uffculme, Devon, the wife of E. S. B. Eames, M.R.C.S., L R.C.P.Lond., of a daughter.

Hayward.—On Sept. 23rd, at 65, Stert Street, Abingdon, the wife of M. Cecil Hayward, M.A., M.R.C.S., of a son.

Pearse.—On Sept. 23rd, at 110, Cathedral Road, Cardiff, the wife of Athol Pearse, M.B Cantab., of a daughter.

Swabey.—On Aug. 28th, at Shwebo, Upper Burmah, the wife of Captain Maurice Swabey, R.A.M.C., of a son.

Marriages.

Bascombe—Miller.—On Sept. 24th, at St. Peter's Church, Eltham Road, S.E., Edwin Cecil Dare Bascombe, L.R.C.P. Lond., M.R.C.S., of Saffron Walden, Essex, to Edith Marion, youngest daughter of T. Hastings-Miller, Esq., of Eltham.

Cowin—Byers. On Sept. 22nd, at Christ Church, Sunderland, Surgeon Captain Douglas H. F. Cowin, I M.S., to Ethel, daughter of William Lumsdon Byers.

Jameson Copland.—On Sept. 27th, at Holy Trinity Church, Eltham, Surgeon Robert D. Jameson, R.N., second son of Surgeon-General Jameson, C.B., K.H.S., M.D., late Director Army Medical Department, to Mabel Greene, daughter of H. S. Copland, Esq., of Eltham.

Morris—Moore.—On Sept. 20th, at All Saints' King's Bromley, Lichfield, Francis Ernest, son of the late J. Griffith Morris, M.R.C.S., of Hereford, to Emily Monica, daughter of the late Richard Bond Moore, M.D., of Wolverhampton.

Deaths.

Gubb.—On Sept. 25th, of meningitis, Edgar Sullivan, only son of Alfred S. Gubb, M.D. (Paris), of 29, Gower Street, W.C., aged 21.

Hague.—On Sept. 26th, at Kingston House, Camberwell, Samuel Hague M.D., LL.B.Lond.

Wright.—On Sept. 29th suddenly, at his residence, 5, Queen Street, Scarborough, Henry Wright, M.R.C.S., L.S.A., aged 76.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, OCTOBER 8, 1902. No. 15.

Original Communications.

THE ADVANCE OF SURGERY DURING THIRTY YEARS. (*a*)

By A. W. MAYO ROBSON, F.R.C.S.ENG., L.R.C.P.LOND.,

Emeritus Professor of Surgery in Yorkshire College.

As a surgeon I hope I may be pardoned if I refer to the advances of surgery which have been so remarkable since I entered on my medical career. I often wonder what he would think could one of the great surgeons of the past return and spend a week in our splendid operating theatres. His first surprise would be to see the patient sleeping quietly while the operation was being performed without fuss or worry. What a contrast to the terrible ordeal of the pre-anæsthetic days, when every moment of the operation caused agonising pain to the patient, and the only chance of relief was by a merciful attack of syncope, and when efficiency had necessarily to be sacrificed to expedition. Anæsthesia is one of the greatest boons conferred on humanity, and the nineteenth century would have been a prominent one in the history of medicine if it had nothing else to record. The public does not as yet perhaps fully grasp the fact that it is almost as important to select a good anæsthetist as a good surgeon, for in competent hands anæsthesia itself involves little or no more danger than a railway ride, but with the happy-go-lucky idea that anyone can give an anæsthetic, alarm, if nothing worse, will be certain to arise from time to time, and the surgeon will often be severely handicapped to the detriment of the patient.

What would next attract the attention of our returned master would be the elaborate care and attention to detail in all the stages of the surgeon's work—the boiling of the instruments and everything that can be boiled, the sterilising by high pressure steam of dressings and sponges, and the great care which the surgeon, the assistants, and the nurses employ in purifying their hands and everything that may come in contact with the wounds. Perhaps at first he might be inclined to scoff at so many details, as, indeed, did some of his colleagues and many of his rivals when the author of antiseptic surgery made public his views, but the scoff would be again turned to surprise if he visited the wards a week later and found the patients looking well with normal temperatures and healed wounds; for he would contrast the old days when after such operations, even had they been conceived possible, the patients would in many cases have perished from the numerous wound complications that almost inevitably followed the surgery of that time and those that had survived would have been found suffering from fever and other sequelæ now rarely seen and usually avoidable. It was too literally true, even within my memory, that the mantle of the master descended to the pupil, as I can recall having a stained and gory coat of many colours and of many years' service handed on to me as my prerogative when in 1884 I was elected to the post on the full staff of the Leeds General Infirmary. I hope I did not give offence to my revered predecessor by wearing that coat only on one occasion and in immediately exchanging it for washable garments, but I do know that at the time I was looked on as presumptuous, to put it in the mildest way possible. What would the student of to-day think if he saw silk for ligatures and dressings for the wound taken straight out of the dirty drawers in the operating theatre and handed to the surgeon by the hospital porter, probably with unwashed hands. I think that he would be as much astonished as the old master who returned to see our house surgeons, dressers, and nurses clothed in clean sterilised gowns and wearing sterilised indiarubber gloves in order that their clothes and hands might not contaminate the wound or the instruments. Could he see the elaborate preparation of sponges and ligatures, the careful preparation of the surgeon and the patient, the careful hæmostasis, and the thousand-and-one details of suturing and application of dressings, I think he would feel that verily the times were not for him until he had returned to school. In comparing the present with the past of medicine and surgery and in attempting to forecast the future I have the advantage of being able from my own experience to contrast the work of 1870 with that of 1902. During that interval of thirty-two years so great have been the changes and so marked have been the advances that one cannot but feel a profound sense of gratitude that it has fallen to our lot to have lived and worked through this important period in the world's history and to have contributed in however so small a degree to the reformation which has occurred in our noble profession.

If we compare the report of the Leeds General Infirmary for the last thirty years we shall see not only that the mortality all round has lessened, but that in certain operations, had not a change come, their performance would have had to remain a matter of history, since the mortality was so high as to render them unjustifiable. Just as the number of operations has increased from 469 in 1870 to 4,385 in 1901, so the all-round mortality has diminished from 6·6 per cent. in 1870 to 2·7 per cent. in 1901, although the magnitude of the operations performed has been in many cases infinitely greater.

An analysis of the hospital registers affords interesting and startling facts. For instance, in the 1902 report the following operations are recorded which have no place in the report of 1870: radical cure of hernia, of which no less than 109 cases are given, which means not only a saving of life and suffering but a restoration to efficiency of so many workers who would otherwise have been severely handicapped in the struggle for existence and only rendered possibly safe from the dangers of strangulation by the wearing of a cumbersome instrument. Of osteotomy, or division of the bones, thirty-eight cases are mentioned in the report for 1901.

According to the hospital reports we note that seventy-eight cases of removal of the vermiform appendix are recorded. The attention of the world at large has quite recently been prominently drawn to this subject by the illness of our beloved King. Now, although it would be wrong to say that the disease was

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(*a*) Abstract of Introductory Address delivered at the Winter session at Yorkshire College, Leeds, on October 1st, 1902.

unknown thirty-two years ago, for it was described by pathologists before that date, yet it is an actual fact that even twenty-five years ago the operation of removing the appendix for appendicitis was practically unknown, though we know that appendicitis with its complications was the cause of death in an immense number of patients who were said to have died from peritonitis. Even in the acute stage of the illness we are now able to save life in a very large percentage of cases by a timely interference, but in the quiescent period, between the attacks, the preventive operation of removing the appendix is almost unattended by risk, a record of several hundred operations of this kind showing no fatality. A reference to the hospital records of recent years shows that in this disease the public are appreciating the fact that prevention is better than cure. Of cholecystotomy and other operations on the gall bladder for the removal of gall-stones and the complications caused by them thirty-eight cases are recorded in the report for 1901. These operations were unknown thirty years ago. We in Leeds have had the proud privilege of helping to advance and to perfect the surgery of the gall-bladder, and in the General Infirmary patients from various parts of the world have sought and obtained relief. These operations have been the means of saving many lives and much suffering, for this form of disease is among the most painful that flesh is heir to. Prostatectomy for the relief of urinary obstruction is an operation that was unknown before 1885. It owes its origin to our late and much lamented colleague McGill, whose name and reputation as a surgical genius add lustre to the Leeds School and in fact to British surgery. He not only originated the operation, but improved and perfected it, and those members of the profession who attended the meeting of the British Medical Association in Leeds in 1889 will remember with what natural pride he showed a number of aged patients in good health on whom the operation had been done. Operations on the intestine, such as the removal of considerable sections, from several inches to even two or three feet, for morbid growth or for gangrene, and various other operations on this portion of the alimentary tract too technical to mention here, are of frequent occurrence now, and bring relief or cure to many patients otherwise doomed to a most painful death. Stomach surgery had no place in the 1870 reports, but in the one issued in 1902 will be found no less than ninety-four operations for various diseases of the stomach. To this advance in surgery the staff of the Leeds General Infirmary have contributed very materially, both in the performance of original operations and in the perfecting of others. As showing the possibilities in this line of work we can point to one now living nearly two years after the removal of nearly the whole of the stomach for malignant disease (at the time of operation he had only at the outside a few weeks to live, yet he now enjoys his meals and to all appearance is in normal health) and also to many men and women restored to a normal state of health, who, but for surgical treatment, must long ago have perished from starvation due to mechanical obstruction of the passage into and out of the stomach. In connection with this line of work no more startling innovation can be noted than the direct treatment of internal bleeding from the stomach, for when general treatment and rest have failed to stop the hæmorrhage we are now able to open the stomach, to search for the bleeding vessel, and to ligature it, instead of standing idly by and watching life slowly slipping away. Nor can anything be more striking than the operative treatment of perforating ulcer of the stomach, where the contents of the stomach, perhaps a full meal, have passed through the opening into the peritoneal cavity, and the patient, who was doomed to death within twenty four or forty-eight hours, is snatched from the verge of the grave by timely surgical interference in which the abdomen is opened and washed out and the perforation is securely stitched up. That the successful removal of part of the liver, of the spleen, and of the kidney is a possibility the reports will show you, yet these operations were not even dreamt of thirty years ago.

But our operative triumphs do not all consist of the removal of diseased parts, as we are able to construct and to build up. For instance, where a bone has been lost, say in the leg or arm, we can engraft and build up a new one, and even where a nerve has been lost or destroyed by disease or injury we are able to transplant a portion of healthy nerve and make good the injury. This operation also had its inception in Leeds, where the first operation of the kind was performed in 1889, a portion of living nerve being transplanted to make up the deficiency in one of the nerves of the forearm, thus restoring sensation and movement to a right hand previously paralysed and which must otherwise have been useless for life. Thanks to the work of Hitzig, Ferrier, Horsley, Jackson, Gowers, and others we are able to map out the site of disease and injury in the brain and spinal cord, and armed with that knowledge surgeons can often attack disease with precision and success. Were it desirable examples could be given of paralysed members being restored to usefulness, of irritating lesions causing convulsions being taken away, of inflammatory effusions and abscesses being localised and removed, and of many other painful and fatal maladies being successfully attacked, practically all these procedures having been first suggested and carried out within the period which I have named. Even a part of a diseased lung has been removed with success, and the evacuation of abscess from within the chest is looked upon as quite an ordinary procedure, yet you would look in vain for these operations in the report for 1870. It would be thought that the heart would be quite beyond the pale of surgery, but so far back as the early "seventies" my distinguished colleagues on the consulting staff, Professor T. Clifford Allbutt and Mr. Wheelhouse, in the Leeds Infirmary successfully attacked an effusion in the sac surrounding the heart and drew off a quantity of fluid that was arresting the cardiac movements. But within the last decade cardiac surgery has made further advances, and you will be astonished to hear that in no less than thirty-eight cases have stab wounds and bullet wounds of the heart been stitched up, with recovery from operation in nineteen cases and complete cure in thirteen cases, yet even when I was a student it was thought that the slightest wound of the heart must inevitably be fatal. The future has probably in store still further advances, for the possibility of opening the heart and dividing certain valvular obstructions which threaten life is even now under consideration. There are many other now well-established, useful, and successful operative measures to be found in the report for 1901, which I could speak of did time allow, that had no mention and which were in fact unknown in 1870. In the same way a reference to the registers shows that some surgical diseases, unfortunately too common in 1870, are now happily rare and in some instances have no place in the report for 1901. I refer to hospital gangrene, pyæmia, erysipelas, septicæmia, and other forms of blood-poisoning, secondary hæmorrhage, and such-like surgical misfortunes. No better examples can be given than that of tetanus or lockjaw, for thirty-two years ago it was not very unusual to see this fatal disease follow even slight operations, yet during the last twenty years I have not seen a single post-operative case, all instances that have come under observation having occurred after neglected wounds received outside the hospital. In the same category may also be mentioned hydrophobia, which has been subdued in England by wise legislation. Perhaps in no class of cases has greater progress to be recorded than in abdominal diseases, which formerly were for the most part treated in the medical wards. For instance, in 1870 and 1871 under the heading "Abdominal Section" no case is reported; in other words, the peritoneal cavity was rarely opened, and then only for ovariotomy and strangulated hernia; whereas in the year 1901 569 patients had abdominal section performed in this hospital for diseases of every organ contained within the abdominal cavity. The statistics of ovariotomy in this hospital twenty-three years ago were so unfavourable that tapping was frequently resorted to in order to defer the operation, and even in 1875 twelve patients were thus treated, only seven having been submitted to the radical operation. Out of these seven five died, yielding a mortality of 71·3 per cent. On the other hand in the year 1901 ovariotomy was performed sixty-four times with sixty recoveries, giving a mortality of 6·2 per cent.; and seeing that this includes malignant, gangrenous, and suppurating cases, as well as those of patients extremely ill in other ways, the mortality is one of which no hospital need feel ashamed.

Just as surgery has taken over the treatment of many medical ailments in the brain, the chest, and the abdomen, so I venture to think that the physician may look forward to the day when the treatment of cancer will return to him and only rarely have to be accomplished by surgical means. Already that chronic form of malignant disease known as "rodent ulcer" is passing from the domains of surgery proper and is being cured by the Röntgen rays, and even the treatment of epithelioma, a more rapid form of malignant disease, is in some cases yielding to similar treatment, as we have been able to show in the Leeds Infirmary. As yet, however, surgery is the sheet anchor of the greater number of cancer cases, and where it has been taken early and treated radically we can point to many patients living active and useful lives many years after the removal of undoubted cancer.

THE POWER OF OBSERVATION IN MEDICINE. (a)

By THOMAS T. WHIPHAM, M.D.Oxon.,
Consulting Physician to St. George's Hospital.

Sir William Gull one day, when in conversation with a colleague, said, "In medicine we make more mistakes by not looking than by not knowing." It sounds like an aphorism of Hippocrates, and I am not sure that even the great Father of Medicine has bequeathed to us one more pregnant with meaning, more universally applicable, or one of more practical utility in medicine and surgery. The aphorism applies not only to medicine; it is equally true in various callings in life, and more especially so, perhaps, in those professions in which an enemy is, if I may use the expression, the *raison d'être* of their existence—in the Navy, in the Army, and—may I add with all due reverence?—in the Church also. The power of being able to see and to appreciate the exact value of the surroundings is of great importance in all ranks of life, and of supreme importance in those professions in which the necessity for organising an attack or preparing for defence forms the chief part of the routine of active service. It may be that the time at a man's disposal for exercising this power is limited to seconds; it may consist in patient and laborious observations extending over a long period of years. Fortunate is the man who is by nature endowed with both. His own reputation, the life of a fellow creature, the existence of a nation, may depend upon his ability to use them.

The faculty of looking is not bestowed upon all of us in equal degree. There are those who neither possess it nor can they acquire it, and these are not for the profession of medicine. They merely "see men as trees walking," or, as Shakespeare so graphically describes the somnambulism of Lady Macbeth:—

> "You see, her eyes are open.
> Ay, but their sense is shut."

Such persons should doubtless seek other and less responsible avocations. "Every man is as God made him and oftentimes a great deal worse." "According to my idea," said Napoleon, "a physician, like a general officer, should be a man possessing great power of discernment and observation which will enable him to discover the strength and position of the enemy." Some men are especially gifted with this power of discernment, but that is no reason why those who are less so should be discouraged. In all probability they are not entirely wanting in some power of observation. Fortunately for themselves they can be taught to cultivate it, just as most boys can be taught to swim; the power is innate and it only requires a little teaching and confidence to call it into action.

"Eyes first, then hands, tongues last and least," is the well-known advice often given to his pupils by the late Sir George Murray Humphry, of Cambridge. Few men have possessed this faculty of observation to a greater degree; no man more thoroughly utilised it in his investigation and treatment of disease. He had more eyes in his head than most people, and he made use of them, every one. Humphry in this phrase wished, as it would seem, to emphasise the importance of a rapid appreciation of surroundings, as compared with a minute and detailed examination by palpation or the voluminous history of a variety of symptoms, the majority of which probably only exist in the imagination of the narrator. What a man sees he can be more or less sure of; what he feels with his hands may be a matter of doubt in dealing with diseases of the human body; what he hears in the history of a case may be altogether erroneous and misleading. Such may, I think, be an amplification of Professor Humphry's phrase. At the same time he was the last man to disparage a carefully-expurgated record of facts, without which diagnosis and treatment would be simply impossible.

The man who lacks this power of looking is the man who cumbers himself with details. We know him in the wards of the hospital and we come across him later—in examination time. He looks into his ink-pot, he looks on his foolscap as he writes out an elaborate history of a trifling ailment, he looks last where he ought to have looked first—at the aspect of his patient. There is little to be done for him, no more than is to be done for the man who is devoid of the sense of humour, who can never see a joke. He must be left to his details.

Now it is by no means impossible for a person outside the ranks of the medical profession to be so far skilled in prognosis, in consequence of having cultivated, quite unconsciously perhaps, the power of looking, as to be able in some cases to predict the event of a disease, the nature and pathology of which are to him unknown quantities. There was, when some of us here to-day were young, a nurse in King's Ward, Mrs. Cran. She was in those days, and I venture to think she would be now, as good a nurse as it is possible to have. As students we would occasionally apply to her for information respecting patients in the wards. Her reply to our questioning would often be something after this style: "I don't know what's the matter with him, but I know he's going to die." From my own recollection it was uncommon for her to be far wrong in her prognosis, whether favourable or otherwise. It was long training and careful observation that enabled her to forecast the future. The possession of "a pair of double million magnifyin' gas microscopes of hextra power," without which Sam Weller, with all his acuteness of vision, was unable "to see through a flight of stairs and a deal door," may not have been vouchsafed to us, but, judging from the instance just mentioned, it is possible for the less appreciative among us to attain by training and perseverance to those three essential requisites of the physician—

> "An eagle's eye, a lady's hand, a lion's heart."

I have chosen as my text a saying of Sir William Gull; let me supplement it by an illustration of the quickness of his power of observation. He had been called into consultation in the case of a lad who had been ill for about a week with fever; otherwise the symptoms were indefinite. He looked at the boy keenly for a few moments, with the body fully exposed; then he placed his hand on the abdomen, and then, having listened attentively to the chest, he retired from the sick room to talk over the case with the doctor in attendance. Now the doctor was not one of those who are characterised by a retiring disposition, and so he at once proceeded, with much confidence and many (to him) irresistible arguments, to set forth his opinion that they had undoubtedly to do with a case of typhoid fever. Sir William Gull listened in silence to all he had to say, and then in his impressive manner replied, "Go back to your patient and look at his belly." He had seen at once that the abdomen was free from distension; he had felt that it was unresisting to pressure, and he in consequence excluded the probability—even almost the possibility—of typhoid fever. The patient shortly afterwards died, the victim of acute tuberculosis. "We make more mistakes by not looking than by not knowing."

(a) Abstract of Introductory Lecture delivered at the Opening of the Winter Session at St. George's Hospital on October 1st, 1902.

In our profession the fact that a man is able to see what he looks at no doubt contributes very materially to his success, for it must be borne in mind that in the management of a patient it is not only his disease that has to be taken into condition but his idiosyncrasies and his peculiarities also. Is he shy and retiring? Is he vain and self confident? Is he hot-tempered and violent? Unless the practitioner is sufficiently observant to have noticed the peculiarity in each case, and possesses the tact and ability to deal with it, he is not likely much longer to retain the individual as one of his patients. By neglecting the aspect of his patient he may deprive himself of the power to render such assistance as his science and his art might be expected to afford. A highly educated physician or surgeon who is wanting in the power of observation may fail, so far as the patient is concerned, where an accurate observer of inferior abilities and attainments will achieve a brilliant success. The necessity for it is perhaps never more fully realised than in the work which devolves upon the medical officer to a life insurance society, and in no branch of medical practice does it stand him in greater stead; in no branch has he better opportunities of testing its value. The duty of a medical officer to an insurance society is not only to detect, as far as may be, the symptoms and signs of incipient disease—a task often of considerable difficulty—but also to form a just and accurate moral estimate of the applicant for a policy. He should be able at his interview with the candidate to judge, for example, how much reliance is to be placed on the answers which a person in pecuniary difficulties and anxious to raise money on a policy thinks fit to return to the questions which are put to him.

Few phrases are, I think, more expressive than the one used by Sir Thomas Watson to describe that remarkable condition of muscular weakness and nervous prostration which so often accompanies different forms of acute and chronic diseases in their later stages. He says that in such circumstances the "patient sinks down in the bed," and in those five words what a picture he paints for those who can see. The whole story is told in a sentence. One can see in a moment most of what has already befallen him, all that at present concerns him, all that his short future in this life is likely to bring him. He is down in the bed because he is unaware that he is so; he is down in the bed because he is powerless to raise himself higher; his sensation is blunted and his feeling benumbed; apathetic and feeble, almost to unconsciousness, he lies utterly regardless of all that surrounds him. But now—

"It is too late: the life of all his blood
Is touch'd corruptibly; and his pure brain,—
Which some suppose the soul's frail dwelling-house,—
Doth, by the idle comments that it makes,
Foretell the ending of mortality." (*King John.*)

The time for the exercise of the faculty of observation is when danger is impending; afterwards it may be too late to retrieve the position. Prompt recognition of the first signs of evil to come is of supreme importance and the failure to appreciate at the moment some apparently insignificant fact may be fraught with disaster to a reputation and involve the possible loss of a life that might be saved.

Let me take an example from everyday life: the occurrence of two or three herpetic vesicles at the angle of the mouth in a patient who comes under observation chiefly on account of high fever and without definite signs pointing to any particular disease. Not much to look at, perhaps, but it affords to the man who has eyes to see it an almost certain indication that typhoid fever may be eliminated from the patient's possible ailments, and that in all probability a few hours will bring forth the physical signs of pneumonia. To take the very common symptom—one of great value as having an important bearing both on prognosis and treatment—that the patient lies with his knees drawn up in the bed. It is a position which at once attracts the attention of him who has eyes to see. Yet it not infrequently escapes the notice of the student and—shall I say it?—of the qualified practitioner also. It seems such a trifling occurrence and so common that it makes no impression on him who is unable to look. This change in the position of the legs should speak volumes to him who is in charge of the patient. It is possibly a fact of great significance; it may indicate two diametrically opposite conditions. It is a sign of hopeful augury on the one hand, and on the other one of grave import. It may mean that the peritoneum is inflamed, the flexion of the knees and the hips serving the purpose of relaxing the abdominal muscles and so relieving the pressure on the tissues that are inflamed. Regarding it as a sign of favourable import, we see in this alteration of posture the evidence of returning vigour, of recovery from the baneful effects of specific fever on the nervous system, as the result of which the patient becomes aware that his extended position is irksome to him and with returning strength makes such changes in it as his wasted and enfeebled muscles permit. Again, note the sharply outlined features of the pallid face, the flush on the cheek, the bright lustre of the eye, the faintly blue tint on the lips, and the probability of tuberculosis is clear at a glance. Observe the dry skin, parchment-like in appearance, the, if possible, still drier lips, which the sufferer endeavours to moisten with a tongue that cleaves to his mouth, the emaciation of the body, the wasting of the limbs, and the presence of diabetes is almost a matter of certainty.

But just a word by way of caution to the junior members of my audience. Let it not for a moment be supposed that from a momentary glance at the aspect of a patient a diagnosis can be made. Aspect, without doubt conveys much valuable information, but diagnosis can only be made by the careful consideration of all facts bearing directly or indirectly upon the case and by the adoption of such methods and appliances, whether ancient or modern, as are likely to assist in the solution of the problem.

Turning more especially to those to whom it is my privilege to welcome to-day, let me impress upon them, at this the commencement of their career, that they must never lose sight of the fact that in all great institutions there are many traditions to be affectionately cherished, to be worthily upheld, and that in this respect St. George's Hospital is by no means an exception. Examples in abundance may be found in the lives and in the deeds of those who have preceded us, who have had so large a share in raising their hospital and its school to the position which it occupies in this city of London.

"Lives of great men all remind us
We can make our lives sublime,
And, departing, leave behind us
Footprints in the sands of Time."

KNOWLEDGE AND WISDOM IN MEDICINE. (a)

By SIR DYCE DUCKWORTH, M.D., LL.D.Ed.,
Physician and Lecturer in Clinical Medicine at St. Bartholomew's Hospital.

I CAN hardly address you here and now without referring to what is surely a vexed question at the present time respecting the proposal to break the bonds which unite you academically with the affiliated colleges of Liverpool and Leeds. Early memories recall to me an abiding rivalry between this and my native city, a rivalry always honourable, though warm with a true Lancashire intensity. I stand here to try and consider this matter with the loyalty of a Lancastrian, tempered, I will venture to hope, by the even-mindedness of an Imperialist long resident in the metropolis. Liverpool has made her decision, and has determined to stand alone and equip herself as an independent University. I feel sure that, whether you regard this step as a wise and provident one, or are of the opinion that it is an unnecessary, and possibly an imprudent, one, you will not be long in following suit, and that you will shortly concentrate within this community of over half a million people all the academic features of this city, and so establish the University of Manchester. Leeds will then have, I imagine, no choice left in the matter, and I shall be surprised if the hard heads and stout hearts of Yorkshire fail to rise to the opportunity of constituting a vigorous University for the largest county in the country. I therefore include myself among those who regard this dissolution as fully within the purview of those who have reached my time of life, and I see no reason for grave concern as respects the outcome of it. In considering the question, the fact must not be forgotten that no new University can by any possibility be made a copy of an older one, for truly a *genius loci* attaches to the character and quality of each; and as Edinburgh is unlike Cambridge, so is Birmingham very unlike Oxford. Certainly, no University of the future will ever resemble that curious but potent academic conglomeration which in its new form is slowly emerging in a corner of the Imperial Institute in London. I think your *genius loci* will carry you through in this city, and a like quality will determine both for Liverpool and Leeds their special needs, and the several methods best fitted to meet them.

(a) Abstract of Introductory Address delivered at the Owens College, Manchester, October 1st, 1902.

After a review of the peculiarities and scope of individual Universities, Sir Dyce Duckworth went on to say that he would have the Universities chiefly concerned in the training of the best candidates for the medical profession, and he would fain have their degrees regarded as honours, not carrying with them State qualifications to practise, but, viewed as indications of distinctly higher attainments conferred on those already holding such diplomas. He urged the necessity of distinguishing between the knowledge which was absolutely necessary for their daily work, and that other variety of knowledge which consists in "knowing about." Dr. Johnson once remarked: "There are two kinds of knowledge, one which you carry in your head, and the other which you know where to find." There were essential and practical parts of their work which must be made their own, worked out and worked in by their hands, eyes, and intelligent attention. These go with you everywhere, as a witty American said—like your fists, added the lecturer. Continuing, he said that no one who considered the matter with an open mind could believe that the medical profession held its legitimate place in public estimation. He believed, however, that estimate to be lower now than was the case half a century ago. While it is certain that the professional knowledge and ability of the great mass of practitioners had increased enormously in recent years, and that the present generation was now better served in all its ills and sufferings than any that has preceded it, it had to be admitted that this appreciation either by the departments of the State or the public was little adequate to its claims. Hospital teachers were sometimes rebuked for their want of loyalty if they fail to encourage their pupils to enter the medical service of the Army. Well, if the country sent its soldier sons to war or to unhealthy parts of the Empire, it was not too much to demand that they should have the service of the best medical skill that could be secured. They would be pleased to recommend the Army Medical Service to their pupils when it was so constituted as to carry no particle of social or professional stigma, and no disability of any kind with it, and when its members were eligible for, and duly received, the recognition bestowed on officers of other departments. The sister service, to which he (the lecturer) once belonged, appeared to him a happier and more attractive one. In this age of monstrous and obtrusive advertisements, continued Sir Dyce Duckworth, we know that almost any figment can, with sufficient money and pertinacity behind it, be readily foisted upon a large section of any community. So with absurd projects of investment, and with a multiplicity of schisms and cults in religion. Consider, for example, that wicked and blasphemous nonsense which is now enlisting the support of many people in America, and of not a few well-placed persons in this country, so improperly called Christian Science or Faith-healing. How much wisdom, think you, is concerned in tenets of that kind? Surely in all these indications of mental feebleness and instability we witness the results of scanty knowledge unbalanced and unchastened by any control derived from wisdom. What are they but conceits and airy delusions which must inevitably go to their doom in failure?

THE MEDICAL CALLING AND CULTURE. (*a*)

By STEPHEN PAGET, M.A.Oxon, F.R.C.S.Eng.,

Surgeon to the Throat and Ear Department at the Hospital.

I may congratulate the new students on their choice of their school, for it would be hard to find anywhere better opportunities for working, or a higher standard of teaching, or more constant help and encouragement. During the last few years an immense amount of time and of money had been spent on the school buildings and they were now almost perfect—well-arranged, well-furnished, and comfortable and healthy to work in; and these material advantages were a very small thing compared to the steady excellence of the teaching and the incessant care that was given to the advancement of every department of the school. Best of all, we work well together; the complex processes of the administration of this great hospital go smoothly, and we are "as a city that is at unity in itself." The new students will find everywhere kindness and goodwill, practical help, and good example; there is no hospital in the world where a man gets more happiness out of his work, or makes better friendships, or learns his business more thoroughly. We might even say that there is no hospital where it is less hard for a man to become what we call "good all round," finding the right way in all things, and sticking to it till the hateful time came when he must say good-bye to this pleasant place. An interesting comparison might be made between hospital life and university life. The hospital buildings may look plain and common-place to strangers, but they have a charm of their own; certainly it would be impossible to find in Cambridge or Oxford any modern bit of building more beautiful than the chapel of the Middlesex Hospital. The hospital garden in summer, when the patients are under the trees and the students are playing tennis, will bear comparison with the empty and useless gardens of the universities all through the long vacation. Our hospital deserves better than any university the name of *alma mater*, for her motherly kindness is not limited to her own sons and daughters, but is extended every year to 4,000 in-patients and 49,000 out-patients. Surely we score here; nobody can call us narrow or selfish or exclusive. Imagine a college at Cambridge or Oxford dispensing culture as we dispense drugs to a daily crowd of unfortunate people who wanted culture; imagine the trivial cases being sent away with culture enough for a week and the serious cases being treated as in-patients till they were sufficiently cultured to be discharged. This sort of university extension is unimaginable; the academic life cannot diffuse itself; we are the one profession whose students are actively and constantly employed in doing good to other people. By this sort of life you learn, as nothing else could teach you, to understand your fellow-creatures. You get a fair insight into social problems; you do not have to go to Toynbee Hall, or any such place, to see how the over-population of London lives, and how drink and preventable diseases, and the sweating system, and immigrant aliens, and dangerous trades, thin their ranks. The proper study of mankind is man; for us that branch of learning is practically a compulsory subject; for undergraduates it is more or less optional. As for the curriculum or studies, nobody can say that it is illiberal, for it is colossal; it would be hard to find a wider or wiser plan of work at Cambridge or

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(*a*) Abstract of Introductory Address delivered at the Middlesex Hospital.

Oxford, or, having found it, to find many students there able to live up to it. Hospital life just at first might not seem pleasant, but we soon got a hold on our work, and then we begin to enjoy our life here, and each year seems pleasanter than the last. It is, indeed, a dismal affair when the time comes that we must leave the hospital. We have made so many friends and have befriended such a multitude of patients; we have accumulated such an amazing quantity of facts and so many strange experiences. We have had the pleasure of working with the nursing staff of the hospital, which is a privilege hardly to be realised at the universities. Our fellow creatures have been our books; we have studied them in a straightforward non-academical way, without affectation and without embarrassment. Athletics and the medical society and the musical society have helped us to enjoy ourselves and, above all, we have had the delightful sense of membership, or unity, or community, or whatever English word you like to use instead of the phrase *esprit de corps*. Hospital life is not only a curriculum or such things as can be marked in examination; it is the whole man, all through his most impressionable years, under all the good influences of the place. It determines a man's life in practice, not by settling for him the exact line of practice that he should follow, but by making him a good all-round student who will be a good all-round medical man whatever sort of practice he may invest his life in. There were three ways by which a student may increase the value of his life against this day of investment. He ought to master one special subject in addition to his general work; he ought to set himself to obtain, even at the sacrifice of time and money, a resident appointment; and he ought to read hard outside his compulsory books. Read, above all, as Middlesex men, enough to understand something of the work that is now being done here and elsewhere on the pathology of cancer. You are proud of your hospital now; try to think how you will feel when some part of the burden of that disease is at last lifted off the world by the help of our own men here.

HINTS TO MEDICAL STUDENTS (a)

By PERCY FLEMING, M.D.Lond., F.R.C.S.Eng.

Assistant Ophthalmic Surgeon to University College Hospital.

In my own opinion the time has come when the delivery of an introductory address might well be allowed to drop. The occasion, however, possesses one pleasant function, since it affords an opportunity, of which I gladly avail myself, of according to all newcomers a hearty welcome to University College.

If I, speaking as I do in the presence of so many distinguished clinical teachers, may without presumption give my opinion as to the essential factor in clinical teaching I should say that the one thing a student wants to take away from a clinical lecture is a mental picture of the actual patient about whom the lecture has been given, with the methods used to elucidate various facts connected with the illness or injury, and the process of reasoning that has step by step led to the final conclusions. A certain number of so-called clinical lectures appear to me to be really systematic lectures given at the bedside, with nothing more than a passing reference, if even that, to the particular patient. And this leads me to speak of the work done in our new clinical laboratory at the hospital. However valuable and however necessary this work may be, it has this disadvantage—that the investigations are of necessity carried on apart from and without any necessary connection with the patient. For example, the clerk in the laboratory under the direction of our able pathologist makes an exhaustive analysis of the urine, stains films, makes cultivations and blood counts, and writes the reports of the results of his several investigations. Now, if the student's work end there I think a great deal of useful training is lost; the clerk in the pathological department should make it his business to associate any particular laboratory report with the patient whom it may concern. And conversely the clerk in charge of a case should master the details of the pathologist's report on that case, and not merely copy it out. If this be neglected and the work merely be laboratory work it will not confer much benefit on the student, or indeed on anyone. On the other hand, it is impossible to over-estimate the value of the work in the clinical laboratory both to the student and to medicine generally if pains be taken to associate the investigations there with the actual patient in the wards; the dry abstract details of the report will become real, vital, and living if they be associated in one's mind with a particular patient occupying a particular bed, having this or that characteristic appearance, and presenting certain special symptoms. And the same remarks apply, of course, to post-mortem examinations. It is a great gain in one sense that these examinations should be conducted thoroughly and systematically by the pathologist, but much will be lost if the symptoms presented by the patient during life be not elucidated and explained by the post-mortem findings at the time of the examination by one who has had care of the patient during life.

And now I should like to say a few words to those of you who, having completed the curriculum, will be leaving the college in the course of the year. You will find, perhaps to your disappointment, that patients will not be ill according to the type described in the book or lecture. Many cases will require much thought for their elucidation. To be successful you must carry on your practice in a true scientific spirit, the spirit, that is, which is ever seeking the truth, which is always ready fearlessly to speak the truth, though be it remembered this need not be done in a brutal manner. And, gentlemen, you must be prepared to suffer for the truth, and, as Turgot well said, in every-day practice it is so very easy to become indolent in investigation and the slave of routine; it is "indolence, obstinacy, and the spirit of routine" that oppose the progress of truth. If you carry on your work in this way you will have your reward—a reward of course far different and of far greater worth than that gained by letting yourself be the "mouthpiece of the passing beliefs of the popular mind." This may give you popularity, it will give you nothing more substantial.

From time to time letters are written to the medical papers upbraiding the unfortunate authors of these introductory addresses for not warning students and their friends of the hard lot of the general practitioner and the small remuneration he can earn, and ridiculing such an ideal as I have put before you. All I can say with reference to such comments is that if your sole object in entering the medical profession is to make money then you have made a great mistake in joining it. I quite realise that the object you have in mind in becoming students here is to gain the knowledge that will qualify you to earn your living—and any man with ordinary industry who has completed the medical course can always do this—and, as was pointed out last year by Dr. Risien Russell in his introductory lecture, the present time is a very favourable one from this point of view. But if this be the end-all, if there be no love of knowledge for its own sake, then the prospect is, I think, a not very happy one.

It is impossible for me to close this brief address without some reference to the University of London. Most of you know that after much travail and labour a new University of London was born a year or two ago. The period of infancy is always a precarious time, and this particular infant is watched and tended by many experts. Of course, the prime difficulty in all such cases is the feeding. And the food that is needed for this infant University is money; unless money be forthcoming this new University may live, but it will not thrive. Now it has occurred to some that it might assist matters if some of this food be given, as it were, in a predigested form. And so it comes about that instead of actual money this college with its equipment has been offered to the new University of London. But the infant's attendants consider that the entire college may possibly be too much for, and might injuriously affect, the constitution of the new University. And the particular part of the college that in their opinion would so disagree is that part which you and I are most interested in—viz., the faculty of medicine. Negotiations are going on and nothing definite is known about them at present, but from time to time rumours appear in the medical papers about the future of the medical faculty of University College. If the faculty of medicine should cease to exist, what will be the position of our school? If we have lost our connection with the college what shall we possess? In the first place we shall have the hospital, the latest and newest, and therefore the best equipped hospital of the largest city in the world, and, whatever be the future of University College, our medical school will continue to exist, and if it is to flourish we must not be content to live on the reputation of those who have worked here before. They in their day and by their work have made University College Hospital famous, we in our day must see to it that fame does not become tarnished or grow less.

(a) Abstract of Introductory Address delivered at University College Hospital.

SO-CALLED NEURASTHENIA, HYSTERIA, AND ABDOMINAL SECTION:

A CLINICAL STUDY.

By J. STUART NAIRNE, F.R.C.S.,
Senior Surgeon, Glasgow Samaritan Hospital for Women.

Some years ago I had the pleasure of reading a paper at Edinburgh to the Psychological Section of the Brit. Med. Assoc. on a subject which had the very abstruse title of "The Psychology of Muscle." In it I dealt specially with what might properly be called the automatic phenomena of muscular movements in relation to their significance as psychological expressions.

I then stated as probable correct deductions from psychological phenomena many physical conditions that I am now prepared to uphold with practical clinical and physiological observations to support me.

To bring the matter to a point, I do not believe that any psychological phenomena can occur without a corresponding physiological condition, to which the relationship is absolutely direct as effect and cause.

I use the term "so-called" in relation to the words hysteria, neurasthenia, only. These words unfortunately have come, to a large extent, to be associated with the idea of female disorders of a rather discreditable type, and which no woman of a self-respecting character would be subjected to. That is, that to some considerable extent the conditions are quasi-voluntary, and that no woman need actually suffer from them. Of course, there are many scholastic and clinical definitions, none of which perfectly meet the case. In fact, however, any kind of word will meet the case as a definition if only a constant and distinct set of ideas is thereby understood. I discard all definitions that depend on the Greek derivations, because to the ordinary mind they convey absolutely nothing at all. *Sthenos*, strength; *a*, privative; *neuron*, a nerve; *usteros*, of the womb. These terms are emphatically of no use as roots of the meanings of the words hysteria and neurasthenia. It is a popular notion that neurasthenia means that the nerves are too strong for the body, also that they are too weak for the body. Hysteria means a preventable disease, as a fit of hysterics, mostly uncontrollable crying or laughing. If we are seeking, however, for a verbal description of both the conditions concerned here, we would say that the real meaning was that the nervous system was, in whole or in part, so out of co-ordination that it failed to discharge its duties automatically.

The general opinion that in so-called hysterical and neurasthenic affections no organic lesion is to be detected is one that needs much consideration and modification. So that I feel I am on safe and neutral ground when I use these terms of hysteria and neurasthenia to indicate conditions of mind and body and exhibitions of vital phenomena for which no apparently organic condition is openly responsible.

Since I sent in the name of this paper to the secretaries of the section I have noticed with pleasure that in the Psychological Section a very similar subject is set down for discussion on what are likely to be very different lines from this. So that it is evident that something is in the air generally with regard to this abstruse problem, the place of neurasthenia, hysteria, hypochondriasis, *et id hoc omne genus*, in therapeutics, medical as well as surgical.

It is a most gratifying thing to me to see that in the psychological section this subject, in fact this very subject on which I am now engaged, is set down for discussion from the purely psychological side.

The description of the circumstances that have accompanied these cases under my own personal observation compel me to ask whether it is not necessary now to reconsider many of the popular views of these so-called nervous affections, and to ask whether our ordinary methods of diagnosis are quite sufficient for them, and further, to mark down as two special points for consideration:—

1. The non-possibility of neurotic condition without organic lesion, or disturbance of physiological phenomena.
2. The possibility of direct nerve stimulation leading to neurotic conditions without apparent or appreciable organic affection.

Almost without exception abdominal section showed gross or at least palpable lesion of some abdominal organ. In some cases there was kidney or ureter disease.

Some showed sub-peritoneal pelvic disease, tumour or other suppurations, lipomas, tumours of various kinds.

Almost of constant appearance was cystic disease of ovaries, broad ligaments, tubes.

Simple inflammatory conditions of uterus, ovaries or appendages, thickening, soft sodden swelling, twisting of parts, with adhesions to surrounding organs.

Flexions, versions, dislocations of all kinds and of every organ. But the most outstanding pathological condition of all was, what I may term "rigid uterus." It occurred, so far as my observation goes, without exception in all cases where neurosis had been a prominent clinical symptom. It was a great surprise to me in my earlier cases to note this strange condition. And many times I missed it; in fact, did not recognise it at all until a marked pronounced case occurred, when the uterus stood rigidly, almost perpendicularly, up and forced itself on my notice. Once seen it is readily found afterwards. The condition naturally varies in many degrees. It is not necessarily, but frequently, associated with fibroid degeneration of the corpus uteri.

There may be a condition of fixity of the body downwards and backwards either with or without flexion; and this fixity varies in degree also.

So far as I am aware this is an undescribed condition, and can be readily accounted for by some pathological lesion in the cord in the lumbar region controlling the nervous supply to the uterus. If this were so, it is easy to see how cures could readily be accounted for, from the application of electricity internally or externally, from the application of counter irritation, blistering, &c., to the spine, and from the cold douche and baths. Also to the failure of what for want of a better name might be called moral suasion methods. I should like to know what good could be expected from encouragement, or seclusion, or "Weir Mitchell ' or anything of that kind, if it were a *bona fide* fact that there did exist an actual lesion somewhere, and that we had somehow at our hands and to some extent means of diagnosing it.

For, taking for granted that what I say is correct about this spasm of the uterus, what other thing could account for it than the condition of its nerve supply? Hence even can easily be accounted for, the failures that have been recorded in relieving neurotic diseases by abdominal section and removing the appendages. The failures quite as naturally follow as the cures. Should the ultimate disease be absolutely central, and should the cutting off of its nerve supply to the organ not be sufficient to alter it beneficially, then the case must be regarded as a failure. Similarly with all other nerve diseases, *e.g.*, neuralgia, tic. If only one can go far enough back in section of the nerve the disease can be cured. Pains and aches and physical discomforts are not necessarily the only resultants from uterine disease. In a very finely balanced human being pain is a factor that has seriously to be reckoned with. Pain is not always only a physical condition; the poor beetle that we tread upon in corporal sufferance feels a pang as great as when a giant dies. But this is not all. It is the psychological element that comes in and complements all our being. Pain cannot only make us nervous, hysterical, neurasthenic, but can drive us mad.

I would not say that the inflammatory conditions of the appendages that one so frequently finds in an abdominal section are of themselves sufficient to produce these troubles we are considering. I would say that frequently they are of no consequence whatever, that they are merely subsidiary, sometimes only concomitants of the obscure disease that is behind. Similarly I, and I am sure most of you who have removed ovaries, have come to place often very little value on the cystic disease that is almost universally present. No doubt it is a satisfaction, a kind of quasi proof, that an operation has not unjustifiably been done when we can puncture those cysts and show the disease. But in themselves they argue nothing. In many cases they are of no importance whatever.

The argument is not from one condition. It must be from all the conditions together.

There, in such serious cases (for neurasthenia, hysteria are serious enough to threaten both life and reason), must be a consensus of at the very least probabilities. One symptom must be added to another, and when they are all added together, and we find not only some degree of error in position, condition and feeling, but can also diagnose a rigid uterus, then I think we have fairly made good our claim to a probable diagnosis.

In order, however, to put my work as clearly before you as I think I have it before myself, I give you the following table as a summary of results:—

1st.—Abdominal section: No disease found, patient informed, nothing removed, patient apparently cured.

2nd.—Abdominal section: Tuberculous condition, nothing removed, patient apparently cured.

3rd. — Abdominal section: Fibroid condition (uterus, ovaries, or other organ), nothing removed, patient apparently cured.

4th.—Abdominal section: No disease found, nothing removed, patient not informed, patient apparently cured.

5th.—Abdominal section: No disease found, patient and friends informed, patient apparently not benefited.

6th.—Patient under anæsthetic: No section done, patient apparently cured.

7th.—Abdominal section: Appendages removed, patient apparently cured.

8th.—Abdominal section: Uterus removed, patient apparently cured.

9th.—Abdominal section: Appendages removed, patient sent to asylum.

10th.—Abdominal section; Uterus removed, patient sent to asylum.

11th.—Abdominal section: Tuberculous condition, nothing removed, patient not cured.

I hope I shall not be understood as advocating abdominal section in all cases of neurasthenia and hysteria. This would be too dreadful to contemplate. It is the other way about. Some cases of neurasthenia and hysteria demand for their successful treatment abdominal section. And it is because in the course of the major operations I have performed I think I have discovered a valuable sign indicative of the kind of case to which the operation is applicable that I have bracketted "neurasthenia, hysteria and abdominal section" together. It is not necessary to perform a section to diagnose this condition; it only requires greater practice in examination, greater patience in observation, greater discrimination in the valuation of the general signs and symptoms. It does not follow, even if one is convinced the conditions are all there, that an abdominal section will be followed by a cure. And therefore it becomes doubly necessary that everything medical and possible should have been done before resort is had to major operation.

Some short time ago Dr. Rabagliati, of Bradford, published a book on "Ovarian Neuralgia," which will well repay careful perusal. Many of these nervous, hysteric and neurotic women have been treated by us too lightly, indifferently, callously sometimes. To tell the truth, we have good reason to be afraid to deal at all with some of them. When they are not regarded as nuisances, they are often considered pests. And without doubt the nature of their trouble tends to render them somewhat irresponsible for their actions. When we come, however, to realise absolutely and clearly that many of these obscure complaints have a real substantial foundation in some physical condition, although the physical signs may not be sufficiently gross for us to put our fingers on, then our efforts to relieve, receive an impetus that they could not have before; seeing we now know that it is only our knowledge that is at fault, and that it is a reasonable thing to suppose that we may by perseverance in observation and increased skill in management enlarge that knowledge sufficiently to enable us to find out a remedy or remedies. No man can labour diligently in treating diseases unless he has a decided conviction that it is at least possible for him to provide remedies.

(To be concluded in our next.)

France.

[FROM OUR OWN CORRESPONDENT.]

PARIS, October 5th, 1902.

ORCHITIS AND PROSTATIC DISEASE.

M. **DESNOS** has published an important article on infections of the epididymis and the testicle in patients suffering from disease of the prostate. Orchitis in such cases can be met with in two forms. One, the simple, produces an inflammatory swelling of the epididymis or the testicle; the neighbouring cellular tissue is the seat of œdema and the tunica vaginalis of moderate effusion. All these symptoms yield promptly to treatment, but frequently the hydrocele persists and some induration of the epididymis. The other form is much more grave, as it consists in numerous small abscesses scattered over the region produced by the infection, and if not treated the patients succumbed from exhaustion. Under the influence of the infection one of the lobes of the prostate becomes swelled and painful, and frequently abscesses are found.

The treatment depends on the origin of the orchitis. If it appears in the course of general urinary infection, the surgeon is disarmed, and can only attempt to sustain the general condition of the patient and to open the collections of matter as they are found. Where the infection reaches the testicle through the vas deferens, a cure may be hoped for; if only one abscess exists a simple incision suffices, but where they are multiplied castration should be performed.

When to Operate in Appendicitis.

The question as to when to operate in cases of appendicitis is still open to discussion in the surgical societies. Some are partisans of immediate operation, while others prefer to retard it until the inflammatory symptoms have subsided. These latter have the advantage of showing a much less mortality. Professor Broca came very nearly settling the question in the discussion on the subject at the annual session of the Surgical Society. After furnishing statistics in favour of the operation *a froid*, he said that the operation could be done during the first ten or twelve hours of the symptoms, and before pus was formed, as advocated by M. Dieulafoy; but the surgeon is rarely ever called at this period, and in any case he might risk to operate where there was no appendicitis (typhoid fever, lead colic, &c.). The reproaches addressed to temporisers might be reduced to one only: that of not being able to foresee how a case of acute appendicitis is going to turn out, and as it was impossible to affirm that it would take a favourable direction, diffused peritonitis might set in which rendered all interference hopeless. An attentive clinical study enabled one to determine what conduct should be taken in face of four principal varieties—diffused peritonitis, circumscribed peritonitis, simple acute appendicitis, and chronic appendicitis.

In case of diffused peritonitis (dry tongue, tympanitis, pain, small and rapid pulse, slight temperature) the operation should be performed without delay, although the chances of the patient are very slight. When the peritonitis is circumscribed, the tongue is loaded but moist, pulse strong and rapid, temperature high, with vomiting. In the right iliac fossa is found a hard swelling painful to pressure. In such cases medical treatment, consisting in opium, applications of ice, absolute rest, &c., should have preference, but on the slightest threat of peritonitis intervention becomes imperative.

When the induration persists several days, and fever and rigor set in, an abscess is certain to exist, but here also the medical treatment may absorb the infiltration. There need be no hurry about opening the abscess, but the patient must be closely watched, and in doubtful cases the operation should be performed without delay.

The indications of operating *à froid* differ as regards the nature of the cases. After two acute attacks every one is agreed that the operation should be done, and the majority of surgeons advise it after the first attack.

As to chronic appendicitis, it is frequently mistaken for other affections, but if really recognised, laparotomy is called for.

Germany.

[From our own Correspondent.]

Berlin, October 4th, 1902.

Hypertrophy of the Prostate Treated by Bottini's Method.

Volkmann's *Sammlung*, No. 328, contains a paper by A. Freudenberg, on this subject. The paper is an account of his most recent experiences, and they are described as among the happiest achievements of modern surgery. Among his last twenty-five cases treated in this way, he has no fewer than twenty recoveries, four cases materially improved, and only one failure. There were no deaths. By recovery the writer understands freedom from catheterisation, the power of micturition without difficulty, and without burdensome frequency, and the diminution to 50 cm., or a complete absence of residual urine. Such results, according to the writer, can only be obtained by thorough and careful study of Bottini's operation, by manual dexterity, and an acquaintance with bladder diseases. It is a great mistake for a man who is not an expert to attempt to carry out such treatment, and can only bring discredit on the method introduced by Bottini.

At the Hufeland Society, Hr. Martin Greifswald introduced the subject of

Genital Tuberculosis.

Although the subject had been studied before, it was Hegar, in 1886, who first made material progress in it. No part of the tract rejoices in immunity; from the vulva to the ovaries, ligaments and tubes, all are capable of infection. It is not altogether a question of quantity and virulence of germs, but there exists a special disposition to the disease, and it would almost appear that women in whom these parts are functionally active in menstruation, conceptions, and labour had a special predisposition. Then gonorrhœal and syphilitic infections, and, further, the puerperal septic processes, favour the disease by setting up dystrophic conditions and hypoplasia.

Genital tuberculosis is, therefore, generally secondary, but the primary disease is not so rare, according to Orthmann amounting to 18 per cent. The special tracts of infection are fairly clear. Infection from the vagina is caused by coitus, but also by other processes.

The tubes afford an especially favourable soil for infection, and also the ovaries. In a large number of cases the history and the general condition led to a suspicion of the disease. In another series of cases we had only the accumulation of leucocytes, whilst giant cells, central necrosis, and tubercle bacilli were absent. These cases were not conclusive. Thus it happened that in 1,500 gynæcological cases there were only twenty-one in which the disease could be proved to exist. Most of the cases were in the thirties, nine multiparæ; of the remaining twelve must have had children a long time before, probably before the disease began. Only one patient appeared as a young lying-in-woman, and in her the disease was first discovered in childbed.

What was striking was the complete absence of clearness about the symptoms. Eight had more or less pronounced lung symptoms. Others were led to seek advice by accidental causes. Three spoke of wasting; six had only vague abdominal pains, and the genital tract showed nothing noticeable; four had irregular menstruation.

This was remarkable, as in earlier observations these disturbances occupied a place in the foreground. For the purpose of differential diagnosis the symptoms were obscure. In four the peritoneum was diseased, once the ovary, once a tube, eleven times there was tubo-ovarian disease, three times the uterus was the site of the disease, and only once was a tuberculous ulcer found in the vagina. The extraordinary intensity of the caseating process was remarkable. This was strikingly so in the case of a robust-looking girl who thought she was pregnant. Even through the abdominal walls thick, nodular masses could be felt. She was not pregnant. The whole omentum and peritoneum were strewn with nodules the size of a plum, and only a few parts of the peritoneum were intact.

As regards prognosis, of the twenty-one cases four had died, and among them the case of extreme caseation of the peritoneum. One died of sepsis, and one acquired general tuberculosis, and died in six weeks. Four might be looked upon as cured. In the remainder the time was too short for a decision. As regarded treatment, his idea was to remove the infection as radically as possible, but this could only be imperfectly accomplished in presence of metastases.

Hr. Gottschalk then reported a case of tuberculosis of the genitals in a virgo intacta. The disease had appeared in the two preceding generations. She was the sister of a physician, and had first menstruated in her twenty-ninth year. Then irregular hæmorrhages appeared. On examination a papillary growth was found on the portio, in which, after prolonged search, giant cells were discovered. The uterus was otherwise small. At the operation both tubes and ovaries showed caseation, and there was a caseous patch in the uterus. Tubercle bacilli were found in the ovaries and tubes. Attachment of the genitals to the peritoneum had prevented the extension of the disease in parts beyond. The patient had since gained fifteen pounds in weight. He had had two cases of genital tuberculosis in which the patients died later on of tuberculosis of the intestines.

Hr. Gebhard had had a similar case to that of Hr. Gottschalk. He found a cauliflower growth on the portio in which tubercle was found. In reply, Hr. Martin observed that in addition to operation, the other usually employed remedies for phthisis ought to be made use of.

Austria.

[FROM OUR OWN CORRESPONDENT.]

VIENNA, October 4th, 1902.

Function of the First Rib.

At the Congress for "Innere Medicin" Rothschild brought the function of the first rib forward as an important item in the face of the present treatment for tuberculosis of the lung. It has been affirmed with some show of anatomical reasoning that the cause of the primary deposit in the apex of the lung was due to a fixure of the first rib, or a sort of hereditary ossification, that seriously impeded the proper function of the lung, first producing a stasis in the organ that ended in the deposit of tubercle, and finally led on to destruction.

Surgeons have operated on cases of this kind in the hope of preventing this morbid result. From a conviction that the premises were wrong Rothschild introduced the function of the first rib, and endeavoured to prove that the ossification of the first rib had no effect on the thoracic space, as its principal function was the movement of the manubrium of the sternum. The space or cavity of the chest is determined by the movement of the ribs that alter the sternal angle.

The so-called Schmorl space, he said, was due to an emphysematous expansion of the lung between the pulmonary and costal surfaces, which in a normal state would be occupied with a healthy organ with less pressure.

When a pathological ossification of the manubrium did take place its severance with the body of the sternum was enough, but not the rib from the sternum by resection, as was at present taught and practised, which appears quite irrational when physiologically considered. The next question, he said, was what benefits were to be derived from a separation of the manubrium and the body of the sternum.

Silicates in Phthisis.

Rohden maintains that silicic acid was a natura cement in the tissues that maintained their healthy existence. It prevents the destruction of the mucous membrane and the breaking up of the cell structure, with subsequent decomposition.

Silicic acid is therefore the fundamental binding agent, just as mortar is required to hold the several stones together in an architectural building. The firm hard muscle with its inert elasticity is due principally to the effects of silicic acid, hence its efficacy in therapeutics—increasing the physiology and making the organism more resistant. The acid is usually assimilated and bound up with another constituent of the organism, hence a useful agent in purulent phthisical changes. It ultimately forms a capsule or hardened cicatrix, and prevents the breaking-up of the cells leading on to a fibrous form of phthisis. The fluor and sodia silicates are usually poisonous, although it appears when perfectly pure they are innocuous, *i.e.*, freed from all fluor ingredients which do seem to be injurious. The best way to administer this drug is to combine it with an alkali or the calci-carbonate of iron.

Paraphenyl Diamine Preparation.

Criegern next introduced a discussion by giving his experience and the results of experiments on animals with silicic acid. The poisoning by this drug might be correctly divided into three stages in its course—(1) the cutaneous inflammation, (2) the upper parts of the respiratory tract, and (3) the asthmatical cramping in the bronchial muscles, at the same time expectorating, the Leyden-Charcot crystals, with Curshmann-Ringer's spiral eosinophil cells. During the course of the poisoning nothing particular can be observed in the nerve system or kidneys. Amongst the workers in this substance the skin affections will be the most trustworthy. In a short time some soon become inured to the poison and become immune, but the larger number become more sensitive to the poison, and hence easier affected.

Electric Conductivity of Blood.

Bickel related his experiments with electricity on fluids, particularly blood, and its relation to the power of renal elimination. The conductivity of electricity is relative to the amount the solution contains of a salt acid or base. The freezing point also gives an approximate measure of the substance held in solution. Now by defining the electric conductivity and the freezing point of the serum, both before and after the extirpation of the kidneys, the salts, acids, and bases with their amount can thus easily be determined in the serum, which has radically the same base as the urine; the difference only being a greater concentration of the latter. It is worthy of note that after the removal of the kidney the serum in the blood is *not* concentrated, but a larger quantity of it is present. It must be inferred from these results that it is the volume of the molecular retention that interferes with the metamorphosis in the organism and not the concentration of the fluids.

Cretinism.

Scholz gave a long history of a number of cases of cretinism which he had treated without success. There was no lengthening of the bones, no poisonous phenomena was observed, but there was a decided falling off of the body weight with alarming mental apathy. The gland had effected emaciation by checking metamorphosis and absorbing the entire fat. From this experiment he concluded that the malformation cretinism was not due to athyreosis. Although the gland is undoubtedly useful in myxœdema, it is useless in this case, if not dangerous.

Blum agreed with Scholz in cretinism, but thought it had reducing effect on the myxœdematous also.

Nannyn thought these defects in the treatment applied to sporadic cretinism only.

Kranz could not agree with the previous speakers, as he had always found the gland successful.

The Operating Theatres.

GUY'S HOSPITAL.

Operation for Recent Fracture of the Surgical Neck of the Humerus.—Mr. Arbuthnot Lane operated on a young man, æt. 19, who had been thrown off a horse. He had pitched on to his right shoulder, and the radiograph showed a transverse fracture of the surgical neck of the humerus; the upper end of the lower fragment was displaced forwards and inwards, while the upper extremity was rotated round an axis passing transversely through the head, so that its fractured aspect looked almost directly backwards; it was clear that it would be impossible to bring the fragments into anything approaching apposition by any manipulative process whatever. Mr. Lane exposed the fracture very freely by a long anterior incision and verified the condition as shown in the radiogram; although several days had elapsed since the receipt of the injury the tension afforded by the swollen deltoid acting as a tie in the length of the bone rendered it exceedingly difficult to bring the broken surfaces into accurate apposition and to secure them with wire. This proceeding occupied more than three-quarters of an hour, and proved absolutely, Mr. Lane thought, the absurdity of supposing that any surgeon could, by any means whatever, other than operative, have returned the bone to its normal form. Mr. Lane said he might point out that one advantage of an operation is that it at once relieves the patient of all pain.

The subsequent progress of the case was perfect, the patient leaving the hospital a fortnight after operation.

HOSPITAL FOR SICK CHILDREN.

Ununited Fracture of Humerus.—Mr. Arbuthnot Lane operated on a girl, æt. about 10, who was admitted with an ununited fracture of the humerus, which had been already operated upon by others on two occasions unsuccessfully. The upper extremity below the junction of the upper two-thirds of the lower third of the humerus was flail-like and absolutely useless. The skin and soft parts about the outer margin of the biceps were deeply scarred and punctured; this was the only evidence found of any previous operation. The ends of the fragments were exposed and were found to be rounded and of a fairly dense structure; they were separated by a considerable interval, and no wire was seen in connection with them; the appearance of the skin incision rather suggested suppuration, so that it was possible that any medium used to connect the ends had been removed of necessity. The ends of the fragments were very freely exposed and corresponding sections were made through each at an angle of 45° to the length; the whole was drilled an inch, and a screw, which was well held, retained the planes of bone securely and immovably in an accurate apposition. The wound was then closed and dressing and suitable splint applied. Mr. Lane pointed out that in the case of an ununited fracture of a single bone the use of the screw was essential to command success; he did not mean that it was impossible to obtain union by means of a wire, but, owing to the fact that the areas of bone which can be brought into apposition are relatively small, and the angle formed by the sectional plane with the axis of the shaft necessarily large, it is impossible by any means with which he is acquainted to retain the fragments in accurate apposition and immovable upon one another by means of wire, and unless the surgeon can secure such immobility he cannot be sure of success. He would urge that in undertaking any such operation requiring the use of the screw that the surgeon should make certain before he commences his operation that he has ready at hand such suitable drills and screw-drivers, as are adapted to the calibres of the screws he intends to use, and not to trust to the haphazard collection of rubbish which is to be found in the instrument cases of many hospitals. To do the operation properly it is absolutely necessary to have suitable tools.

ITALIAN HOSPITAL, QUEEN'S SQUARE.

Exploration on the Site of a Nephrorrhaphy Done Four Years Previously. — Mr. Lenthal Cheatle operated on a young woman upon whom he had previously performed nephrorrhaphy on the right kidney, four years previously, at the West London Hospital. The exploration was undertaken at the present because the girl had lately been suffering from symptoms which seemed to point to the organ having again become movable, such as dragging pain, worse on getting about, in the right renal region, together with a feeling of nausea on pressing the kidney; besides, on palpating the kidney, it slipped slightly under the fingers. An incision was made parallel and close to the scar of the old wound along the twelfth rib; this being carried right through the abdominal wall, opened into the kidney, which was practically incorporated with the abdominal parietes. As the symptoms evidently could not have been caused by the kidney having become detached, the abdominal wound was closed, a small piece of the kidney having been first removed, in order to make certain, by microscopical examination, that it was kidney. Mr. Cheatle said it was demonstrated that the operation performed four years ago had been successful; the method then adopted was that advocated by Mr. Jacobson in "The Operations of Surgery," namely, after the withdrawal of the kidney through the wound, a longitudinal incision is made through the capsule of the organ along its convex border. The capsule is then stripped off the kidney up to a point half way along its lateral surface; these flaps are then stitched into the edges of the wound. Although the symptoms in this case had pointed to detachment of the previously stitched up kidney, it was possible, he remarked, that they were the result of a neurotic temperament, this being proved by the negative result of the exploration. Mr. Cheatle pointed out that, viewing the successful result of the first operation, he intended, when practicable, to perform all his nephrorrhaphies by this method.

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"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 8, 1902.

THE INTRODUCTORY ADDRESSES.

THE time-honoured custom of delivering an introductory address by way of a welcome to new students seems to die hard, although there are not wanting signs of a certain fatigue on the part of those upon whom, at intervals, devolves the onerous task of endeavouring to provide an address with some claim to originality. If the addresses which we publish in abstract elsewhere cannot truthfully be described as strikingly original they will, nevertheless, well repay perusal. Taken together they inculcate many important truths, and they give a very vivid picture of the practice of medicine, its requirements, its drawbacks, and its advantages. The student is told, bluntly enough, that if he proposes to practise medicine with the object of making money he has been ill-advised, and there are the usual "offers of compensation" in the form of social esteem and the consciousness of well-doing. It is always good to be reminded that "Most of sterling worth] is what Our own experience teaches," such experience being the outcome of careful observation and trained judgment. It is of the greatest importance to remember that mistakes in medicine are due far oftener to want of care than to want of knowledge, a dictum of which the truth is exemplified in everyday experience. Eyes first, then hands, tongues last and least, is another aphorism, re-edited by the late Sir George Humphry, upon which practitioners, young and old, will do well to ponder. What a man sees, says Dr. Whipham, he can be more or less sure of, what he feels with his hands may be a matter of doubt in dealing with diseases of the human body, and what he hears may be altogether erroneous and misleading. It is no new thing for lecturers to seek to impress upon us the imperative necessity of studying the patient as well as, even in preference to, the disease; but the maxim is one which will bear repetition. After all it is doubtful whether this profusion of "wise saws and modern instances" serve any other purpose than to point a moral or adorn a tale. It would be over-sanguine to suppose that their delivery will modify one jot the future conduct of those who have been privileged to listen thereto. The proper object of these introductory addresses, it seems to us, is rather to interest the student in the career upon which he is about to enter, to place that career before him, not in the light in which it appears to an assistant-physician or junior surgeon who has been waiting eagerly and hungrily during many years for his seniors to withdraw into private life, but rather from the point of view of those who have already achieved success in their calling, who are satisfied with the present and enthusiastic in respect of future developments. Let the lecturers tell their students what has been done and what remains to be done, how they have contributed their quota to the sum of human knowledge and how it lies with their listeners to unravel problems still awaiting solution. The ideal should be high, not pointed at the horizon, for he who aims high will assuredly go higher than he whose vision does not soar above a sign-post. This conception is the one which commended itself to Mr. Mayo Robson, whose stirring address cannot fail to encourage students, new and old, by proving, statistics in hand, that much has been accomplished, and that much more may yet be hoped for. Whatever be the ultimate fate of the introductory address, it is to be hoped that it will not degenerate, as in some instances it exhibits a tendency to do, into mere "tooting" of the particular school. "They are all honourable men," but there is no necessity to blow each little horn on such occasions, even in what Sir Dyce Duckworth calls "this age of monstrous and obtrusive advertisement." If we may be permitted one little word of counsel to future compilers of introductory addresses, it will be to consult a dictionary of quotations in order to be spared the necessity of making use of passages which, by constant reiteration, have long since lost the inestimable quality of freshness and novelty.

FIRE PERILS AT HOSPITALS.

Every year a great number of lives are lost among the general population of this and of other countries as the result of fires. For the most part the history of these fatalities is continuous and fairly even in distribution over the weeks and months of the year. At times, however, it is chequered with the record of some disaster that sends a shock through the civilised world. The burning of the Ring Theatre in Vienna, with its loss of 450 lives, furnished a terrible lesson on the danger of allowing places of amusement to be built without a due regard to fire prevention and to fire exits. Yet theatre construction in our own country is often in a most unsatisfactory condition. The efforts being made at the present moment by the London County Council for reform in that direction are being obstructed tooth and nail by an association of owners and lessees of theatres. It is the old tale of the safety of the public being sacrificed to the greed of vested interests. Other historical disasters were the Opera Comique Fire in Paris in 1887, when 115 lives were lost; the Exeter Theatre in the same year, with 160 deaths; and the Paris Bazaar Fire in 1897, with 124 fatalities. There can be little doubt that, with a proper amount of care, buildings of that kind could be rendered reasonably safe in case of fire. A similar remark applies to churches, where disasters of the kind are more or less regularly recurrent, and which have received a good deal of attention at the hands of those specially interested in fire prevention. That a great deal remains to be done both by way of fire-prevention and of fire-extinction and life-saving is abundantly shown by recent experiences in the metropolis of the United Kingdom. Recently in the heart of London several fires have spread to an extent hardly creditable to the fire-extinguishing resources of the Metropolitan Fire Brigade. Only a few months ago, moreover, eight or nine persons were sacrificed because the brigade was not provided with proper life-saving appliances to reach an ordinary fourth floor about fifty feet above the pavement. That exhibition of incompetence and impotency took place in broad daylight within a stone's throw of a City fire station, while the fire itself was comparatively insignificant and readily extinguished. In the Coroner's inquiry held subsequently it was shown that the safety of workpeople against fire depended on Building and Factory Acts, defective both in nature and administration, and upon a fire brigade furnished with inadequate and antiquated appliances. From these facts it is evident that the public cannot be said to have reached a maximum of security against the preventable risks of fire. It will be well, then, at this juncture, to call attention to another danger in our midst, namely, that of the hospitals. If the danger be great in the case of theatres and churches, which are filled with able-bodied persons, it must be a thousand times greater in the case of hospitals, which are tenanted by a densely crowded and more or less helpless and bedridden population. Yet the construction of hospitals is, for the most part, of such a type as to invite the rapid spread of fire, while their fire-extinguishing apparatus is inadequate or useless. Sooner or later a terrible catastrophe must happen to one of the great hospitals in the United Kingdom. Hundreds of lives will be sacrificed, and after that huge holocaust the Legislature will probably turn a tardy attention to the necessity of regulating the structure of buildings used for hospital purposes. Numerous small fires have been reported from time to time in this country. Only last week an outbreak of the kind took place in the well-known Addenbrooke Hospital at Cambridge, but, although the wards of a portion of the building were entirely destroyed, the inmates, to the number of twenty, were happily rescued. Some day, we venture to predict, on the score of probability, and in the light of accumulated human experience, that the tale of disaster will not end in the destruction of hospital property. More than one serious tragedy of the kind has occurred in the United States. For our own part we hold that it is the duty of every committee of a medical charity to take immediate steps to secure to the utmost possible extent the safety of the inmates within their walls in the directions of fire prevention, of fire extinction, and of life-saving exits and appliances. Further, in the absence of such precautions on a general scale, we hold it to be the plain duty of the Legislature to ensure that all hospitals and asylums for the reception of sick and otherwise helpless members of the community should be provided with the best modern means of prevention of loss of life and of property. Without some such forethought there can be little doubt that the community will one day be shocked by the news of a terrible disaster from fire in one of our hospitals, and will receive one more tragic illustration of the homely adage that "prevention is better than cure."

ENGLISH RULE IN IRELAND AND THE MEDICAL PROFESSION.

The loyal and dutiful address presented by the Royal College of Physicians of Ireland to the newly-appointed Representative of his Majesty in Ireland last week was in thorough accord with the reputation and precedents of that body, and was received most graciously by the Earl of Dudley. This address, with his Excellency's reply, will be found in another column, and will be a source of gratification, not alone to the President and Fellows of the College, but to the medical profession generally. In brief, the loyal address presented by loyal subjects of his Majesty to his Majesty's representative was dutifully presented and graciously received. Unfortunately for the welfare of Ireland, the Earl of Dudley, however, comes over here in two different characters. He comes as the Representative of his Majesty, and he comes as the Head of the Executive Government. The address of the College of Physicians was presented to the Representative of the King, and consequently all political references were rightly forbidden, and all suggestions of dissatisfaction were courteously excluded. We fear, however, that were such references permitted, and were the address to the Head of the Executive Government, the dominant note would not be one of assurance that matters relating to the medical profession in Ireland were in such a condition as to furnish a cause for congratulation to his Majesty's Government, but that, on the contrary, many reasons for anxiety on the parts of the heads of the medical profession as to the future of that profession would be adduced. We do not here refer to grievances affecting the Royal College or the heads of the medical profession in the Irish cities, but we refer to the position in which a great part of the medical profession in Ireland has been placed by the direct action of his Majesty's Government. It is not wise to gloss over dangerous conditions in social life once all hope is lost that the danger may gradually die away of itself, any more than it is wise to allow an abscess to persist in the body once it has reached such a size that resolution is impossible. The experience of statesmen and researches of physicians lead us to the same conclusion, that an evil—if it is an evil—is better displayed to the light of day than allowed to increase in size and danger in secret. Accordingly, we believe that any address from the Heads of the medical profession in Ireland to the Head of the Executive Government would not be complete unless it directed attention to the dangers which invest the future of the Irish Poor-law Medical Service. It is an open secret—that is to say, it is a secret which everyone but the Government knows—that at present a deliberate attempt is being made to lay hold of a public department, which is maintained by the money of the State and of the ratepayers, for the purpose of advancing the propaganda of a political organisation. It is known, and openly declared, that posts in this service shall be given to men, not on account of their qualifications or experience, but because they have enrolled themselves as members of the United Irish League, or because they have given proof of a real or assumed animosity to the State in other ways. Advertisements have been issued calling for candidates for dispensary appointments who are members of the League. Appointment as *locum tenens* for an existing medical officer has been refused because the candidate had served as a medical volunteer in South Africa. Daily, the medical officer in a United League district is harassed and annoyed in the discharge of his duties, because he is not one with the masters towhom the Government have entrusted him. It has come to this, and we say it without fear of contradiction, that, in the greater part of Ireland the fact that a candidate for a post in the Poor-Law Service is a loyal subject of the King is sufficient to ensure his defeat. Further, it will in a short time come to this, unless the Government interferes—and again we speak without fear of contradiction—that in a short time no candidate will be elected in these districts unless he is a member of the United Irish League. This is a position which must cause the most keen anxiety in the minds of the heads of the medical profession in Ireland, and which, were the opportunity given, we cannot but think they would lay before the Head of the Executive Government. The question to be asked is simple. Is a public service, paid for by the State and the ratepayers, to be turned into an appendage of a political organisation, and to be used as a means of spreading disloyalty and sedition? What will be the answer of the Government? Will they wait until the service has been ruined and its prime cause—the relief of suffering—forgotten; or will they makeafirm stand and take the Poor-Law Service out of the hands of its present masters. His Majesty's Representative in Ireland, in replying to the deputation of the Royal College, said, "I am well aware that the help which your profession can render to the ends of good government is of great and increasing importance." The United Irish League, on the other hand says, and truly, that it is well aware of the help, which the disposal of posts in the Poor-Law Medical Service among their supporters gives to the furtherance of the aims of the League. Which view of the matter do the advisers of his Majesty's Government take? Is the Irish Poor-Law Service to be officered by an independent body of medical men, who will be of assistance to the Government by their knowledge of "the wise application of the laws of health and of sanitation," or is it to be turned into the perquisite of a political party, and to be used as a means of rewarding disloyalty?

Notes on Current Topics.

The Shop-Seats Act.

THE law of England—meaning by that term the United Kingdom—is, in truth, mysterious and baffling in its evolution. No sooner has a really sound and beneficial Act been passed than it becomes a kind of happy hunting ground for lawyers of all degrees, from judges to attorneys. The particular kind of sport obtainable is to find some verbal point whereby, with much quibbling and display of stern judicial childishness, the public may be straightway deprived of the goodness of the Act. At the same time much work is provided for the lawyers who join with ardour in the chase that to them is auriferous, although to the rest of the world it is ruinous and sterile. An instance of this ingenious reversal of the spirit of an Act was given last week by Mr. Sheil, the London magistrate. In a case before him the County Council prosecuted a publican for not providing seats under the Seats for Shop Assistants Act, 1899. Hitherto that most salutary measure has worked excellently well, but Mr. Sheil has discovered that the Act must be construed as one with the Shop Hours Act of 1892, which applies only to young persons under eighteen. If that be so, the Shop-Seats Act is pithed of its effectiveness. This decision is certainly absolutely opposed to the spirit of the Act, and would hardly proceed from a broad-minded and resolute Bench. Years ago we remember Mr. Sheil's extraordinary attitude with regard to prisoners of obviously unsound mind, whose responsibility he settled forthwith with an equal amount of self-confident disregard of consequences as that which now apparently leads him in this attempt—for his judgment is, happily, by no means either decisive or final—to throw obstacles in the path of a humane law affecting a class that needs protection.

Counter Prescribing and its Sequel.

A case of poisoning by hydrocyanic acid has been recently investigated at Brighton. A verdict practically of death by misadventure was returned by the jury, who found that the hydrocyanic acid which caused the death was "one of the ingredients of a mixture dispensed by Arthur Thomas Jeeves." From the remarks of the Coroner it appears that the mixture was dispensed by Mr. Jeeves upon his own responsibility and not upon the prescription of a medical man. Moreover, he kept no written record of the amount of acid which was used, nor, indeed, was any note whatever made of the transaction. A precaution demanded legally under any circumstances was therefore omitted under other conditions which are of doubtful legality, namely, those of unqualified prescribing, and the result is death. Under these circumstances it is impossible to avoid the conclusion that, technically, Mr. Jeeves could be indicted for manslaughter, although there is not much likelihood that such a charge could be sustained. So long as chemists undertake the serious responsibility of prescribing medicines, when their plain and bounden duty is merely to dispense mixtures under the orders of qualified medical men, so long will the safety of the public be endangered, and the pathway of the prescribing chemist be mined with disastrous pitfalls. The evidence at the inquest was to the effect that the mixture contained bicarbonate of potash and sal volatile in addition to hydrocyanic acid. The medical man who would order so dangerous and unscientific a combination of drugs would be a reproach to his alma mater.

Anti-Tetanus Serum and its Administration.

Experience with anti-tetanus serum has not, so far, given altogether satisfactory results, but there is reason to believe that its failures may be due in part to the method of administration. Drs. Descos and Barthelemy, of Lyons, recently brought before the French Société de Biologie the results of a series of experiments having for object to determine the influence of the mode of administration on the preventive and curative properties of the serum. They point out that, injected twenty-four hours before inoculation of the active virus, the serum affords absolute immunity in doses (in rabbits) of one ten-thousandth of the body weight, and if injected into the veins the immunity is obtained with one-tenth of the normal dose. Even in doses varying from one to ten-millionth of the body weight the survival of the animal is ensured, though the supervention of symptoms of tetanus may not thereby be altogether prevented. Injected immediately, or within twenty-four hours of the inoculation of the active virus, in doses of one ten-thousandth of the body weight, it invariably prevented its evolution, or at any rate markedly attenuated the symptoms, the results being most satisfactory when injected into the veins. The most important fact observed by them is that if the injection of the serum be delayed until after the period of incubation, *i e.*, until the first appearance of muscular spasm, the serum proved unavailing in ordinary doses except in the cases in which intravenous injections were practised. If, however, much larger doses are employed and repeated every twelve hours recovery followed irrespective of the method of injection. Injected at a period when the disease has attained its full development the serum appears to be incapable of arresting the disease, though in two instances recovery followed its injection into the sub-arachnoid space.

Suture of Wounds of the Liver.

Up to the present no trustworthy system of suture applicable to such solid, and at the same time soft, viscera as the liver and spleen has had any vogue. In fact the usual treatment of any wound of such organs involving more than the investing capsules has been by packing and connecting with the surface. Lately, an American surgeon, Mr. Coffey, of Portland, has devised and published a method of suture which, to say the least, promises well and deserves the consideration of investigators. Its essential feature is the use of a canules-traction suture passing through the deep loops of an ordinary deep suture, and attached to a mat of catgut used as a support on the distal side of the organ, similar mats supporting the ends of the main suture. Mr. Coffey claims that as much pressure as is required can be used, since in each case the pressure is applied to the capsule only, and is equalised by the mats of catgut over some extent of surface, just as pressure is eased on the skin by the use of lead plates.

The Drawbacks of Soothing Mixtures.

The use of narcotics to relieve abdominal pain often has for effect to mask symptoms pointing to grave visceral disease. Many persons suffering from incipient typhoid fever or appendicitis apply to the nearest retail chemist for a soothing draught, and have thereby been enabled to postpone obtaining skilled advice until much, possibly irremediable, mischief has been done. The same remark applies, of course, to the routine employment of narcotics by medical men, but it is to be hoped that by this time practitioners in general are cognisant of the undesirability of prescribing sedatives until the source of the disturbance has been ascertained. If we take, for instance, the case of a person suffering from violent abdominal pain due to rupture of a gastric or duodenal abscess, the relief afforded by a hypodermic injection of morphia will divert attention from the grave underlying lesion until surgical aid has become useless. This is even more likely to occur in a comparatively common lesion such as appendicitis, a condition in which immediate diagnosis is all important if the patient is to be protected against the risks inseparable therefrom. Over and over again persons in the initial period of typhoid fever have continued to get about, thanks to repeated doses of sedative astringent medicines, until peritonitis or hæmorrhages revealed the grave nature of the disease. The moral is that the symptomatic treatment of abdominal pain is dangerous and unscientific.

A Curious Charge against a Medical Man.

One of the occasional cases, which emphasise the dangers that a medical man runs, has just made its first appearance in court in the form of an application to remit the trial to the County Court Judge. The plaintiff, a herd in the north of Ireland, claimed damages for the death of his daughter, which it is alleged was caused by the administration to her while under the defendant's care of injurious drugs and medicines. The defendant, who is dispensary medical officer, prescribed for the daughter during the course of an illegitimate pregnancy, and the latter died shortly after the birth of the infant. The accusation apparently is that drugs were administered which procured abortion, but the counsel for the plaintiff did not suggest that they were deliberately administered, but that they were given through negligence. On account of the importance of the case, the medicines in question were sent to the Government analyst, and were found to be absolutely innocent. Accordingly, the application was granted, and the case remitted to the County Court Judge. There is a very widely spread notion among the general public that there are certain drugs which will procure abortion without endangering the life of the patient, and nothing that medical men can say to the contrary will eradicate the notion. The result is that scoundrels of all kinds flourish by duping unfortunate women who desire to escape from the consequences of conception. Such a notion must have been present in the mind of the plaintiff in the present case, or else it is difficult to surmise on what grounds the action was brought. As, however, the case is still *sub judice*, we must not comment further upon it.

Nasal Dysmenorrhœa.

Some months since we called attention to a curious association which was alleged to exist between certain areas of the nasal mucosa and dysmenorrhœa. It was stated that the application of a local anæsthetic, such as cocaine, to the inferior turbinal and to the tubercle of the septum determined marked alleviation of the painful manifestations. Subsequent observations tend to show that this action is in the main due to "suggestion," just as dysmenorrhœa itself is in many instances a neurasthenic manifestation. We know, however, that certain forms of dysmenorrhœa are very amenable to remedies of the analgesic class, and it is quite possible that the absorption of the alkaloid by the nasal mucous membrane may also play a part in bringing about the result. Even if the intranasal treatment of dysmenorrhœa be purely "suggestive," there is no reason why it should not be afforded a trial, especially as the one object which the practitioner has in view is the relief of suffering, no matter by what means. Suggestion is a potent factor in the medicinal treatment of many complaints other than dysmenorrhœa, and is as legitimate a branch of the healing art as any other.

A New Method of Extracting Foreign Bodies in the Ear.

There is no more delicate, and even difficult, task than the extraction, in some cases, of a foreign body which has found its way into the external auditory canal. Irrigation often fails to bring it away, and in certain cases adds to the difficulty by causing the object, a pea for instance, to swell and become more firmly impacted. The employment of instruments is very painful, and requires considerable dexterity, besides supposing an armamentarium specially designed for the purpose, which few practitioners possess. A French physician recommends the use of a piece of soft rubber tube, of a size allowing of its easy introduction, the length of a cigarette. The end is dipped into paraffin and pushed into the canal until it comes into contact with the foreign body, whereupon the operator, applying his mouth to the free end, aspirates forcibly, at the same time throwing back his head. Except in the case of angular bodies of irregular contour the method is usually attended by success, the body coming away with the tube.

The Duplicate Stethoscope.

It is asserted that great assistance may be derived in the diagnosis of pulmonary disease by the employment of a double or duplicate stethoscope, that is to say, an instrument comprising two auditory conduits. These are applied simultaneously to the two sides of the chest, and with a little practice it is said to be quite possible to detect the most minute differences in the sounds heard on either side. Of course some familiarity with the instrument is necessary to obtain the best results, but we are informed that with practice no difficulty is experienced in locating the sounds to their respective source of origin. Perhaps one or other of the enterprising firms of instrument makers will enable us to give this method a trial.

The Mammary Gland Treatment of Uterine Fibroids.

In contrast with the method of treating uterine cancer by the ablation of the breast it is found that the administration of the dry extract of mammary gland provokes contraction of uterine fibromyomata, and in the long run determines retrogression of the growth. One of the first effects is a diminution in the duration and amount of the hæmorrhage to which these growths give rise. As might be expected, the effects are most marked in proportion to the richness of the growth in muscle elements, being less pronounced or absent in growths of a more purely fibrous character.

New Food Plants in Yucatan.

The food problem is the puzzle of existence. As regards the human race, the world is rapidly getting smaller. War, pestilence, and famine still account for much wreckage, but much of human effort is devoted to the preservation and protection of life. Most questions can at least in certain phases be stated in terms of food values. Although we may not aggressively live to eat we most assuredly must eat to live, and so the main element in the daily task is the provision of the daily food. It is encouraging to know from the current number of the *Journal of the Society of Arts* that we have not exhausted our resources as regards nutrients. The gardens and fields of Yucatan, it seems, are filled with succulent vegetables and sweet-smelling herbs unknown to the outer world. In the cultivated fields at the proper season appear Indian corn, beans, and tubers for which we have no name, for the good reason that they have been neither seen nor heard of outside Yucatan. The forests and jungles contain fruits that, excellent even in their wild state, could be made delicious by scientific care and cultivation. There are many wild fruits that offer more promising results than did the bitter wild almond, the progenitor of the peach. All this makes us wish that it were possible to transport some of our hungry submerged with a few Kew gardeners to this veritable Paradise for famished souls. We hope the directorate of the Garden Cities movement will look into this matter.

The Prophylactic Value of Mother's Milk.

Lactation is a physiological function of the highest ethical importance. Suckling would seem among some women to be fast becoming a lost art. It is certainly unfashionable in many quarters. Comparatively few view it as one of the highest duties of motherhood. The making of men, and all that this means, does not come within the philosophy and practice of the would-be up-to-date woman. And thereby they are effectually compassing their own elimination. Few recognise the immense importance of human milk to the developing child. It is more than a mere food. As Professor Welch pointed out, in his luminous Huxley lecture on Wednesday last, a mother's lacteal secretion contained bodies, which, whether of an anti-toxic or allied nature, certainly secured to the suckling a degree of immunity to some forms, at least, of infection. There is reason to believe that this may explain to some extent the terrible slaughter of the innocents from infectious gastro-intestinal catarrh, which every season proves such a scourge to young life. In departing from a compliance with natural law we travel into an unknown land, the darkness of which even the light of science can only feebly penetrate.

Consumption Scares.

Pulmonary tuberculosis is a scourge, and in truth well merits the term of "the great white plague;" but efforts to secure its extermination will not gain much by any methods seeking to provoke a scare. We strongly deprecate attempts in the public Press sometimes made by misguided sanitarians to frighten the people into right doing. The educational value of fear is always slight and generally very ephemeral. The dissemination of reckless statements regarding the manner in which consumption is spread is "hardening the heart of Pharaoh" and staying the feet of progress. In this, as in so many other ills, the old advice is still the best advice: Educate, educate, educate.

The Tuberculous Tube.

The "Tuppenny Tube" has proved a veritable boon to large numbers of London's workers, but, as we have on more than one occasion pointed out, it is not free from certain serious sanitary defects. The lack of adequate, we might almost say any, ventilation the free circulation of dust, the dirty state of many of the cars, platforms and lifts, and the gross overcrowding permitted at certain periods of the day, are all important factors favouring tuberculous infection. Within the last few days we observe the health authorities of the City of London have succeeded in hanging modest-looking cards in inconspicuous positions, politely drawing attention to the objectionable features of spitting. It is time the directorate of the Central London Railway took steps to abate the danger threatening many passengers.

Nurses and Death Certificates.

The modern nurse is often mighty, and, at least with young practitioners, frequently prevails. There must be a limit to the meddlesomeness of mock nurses, and surely the certificate of death might be thought to be sacred from reckless intrusion. But it seems not. According to the daily press, the house surgeon of the Royal Hospital, Richmond, at an inquest recently held, has admitted that "it seemed to have been the practice in that hospital for nurses to make out certificates, and for the doctors to sign them." We hope there is some mistake in the published account, for so unseemly a proceeding calls for the strongest condemnation. We trust the Medical Board of the Richmond Hospital will lose no time in looking into this matter.

The International Congress on Tuberculosis, to be held in Berlin from October 22nd to 26th, will hold its meetings in the Prussian Parliament House. Koch's contention of last year will form the chief subject of discussion.

Sir William Taylor, K.C.B., Director-Genera of the Army Medical Service, will give an address on "The Medical Profession in Relation to the Army," on Wednesday, October 15th, at 8.30 p.m., on the occasion of the annual public night of the Medical Society of University College, London.

The Treatment of Dysmenorrhœa.

It is an old and well-established maxim that a multiplicity of remedies for a particular disease is evidence of the general inefficacity of treatment. This remark assuredly applies to dysmenorrhœa, an ill-understood disorder of probably very diverse origin. It follows that until we have a clearer idea of the etiology and nature of the disorder we must expect remedies, therefore, to make their appearance with the regularity and profusion with which they have hitherto been forthcoming, especially from the United States. Unquestionably there are medicinal agents capable of relieving the distress in certain classes of cases, the difficulty lies in the difficulty of classifying the cases in such a way as to afford distinct indications for this or that treatment. The latest "cure" for dysmenorrhœa is the administration of thyroid extract, and in view of the intimate relationship which exists between the utero-ovarian zone and the thyroid gland the treatment possesses a certain plausibility. Dr. Stinson, of San Francisco, asserts that he has been successful in eighty per cent. of his cases. His plan is to give a grain of the dry extract of the gland three times for a day or two preceding menstruation, doubling the dose during the period.

The Mania for Medical Advertisement.

Of late members of the medical profession seem to have been bitten with a perfect mania for advertisement. The example was not improbably set by the baronets and knights of the profession, aided and abetted by their would-be titled *confrères*. For several years the public newspapers have been the recipients of signed letters from these gentlemen upon such topics as the relationship of oysters to disease, the best way of dealing with enteric fever, the value of certain quack drugs, how to exterminate tuberculosis, and kindred questions that would have been just as usefully discussed by way of unsigned communications. It is hardly to be wondered at if their example has been imitated by general practitioners in various parts of the United Kingdom. Two flagrant, if somewhat amusing, instances of this advertising letter have been brought to our notice during the last week. In one of them a Reading practitioner contributed to a London newspaper his views as to the precise nature of the injury to President Roosevelt's knee. His learned description involved references to periosteum, aspirator, drainage-tubes *in situ*, sequestra, and other highly technical terms. The hardihood of his publication is simply unspeakable when it is reflected that all this unnecessary detail resulted from pure imagination, as he had neither seen the case nor, as he admits, read any authentic medical description of the real state of affairs. The second offender is a gentleman in Manchester who, in reference to the recent lamented death of Monsieur Zola, granted an interview to a correspondent of the *Manchester Courier*, in which journal appeared subsequently a long account of the doctor's personal experiences of asphyxiation.

The Royal Orthopædic Hospital.

A letter explaining their position with regard to the sale of site has been published by the President, the Treasurer, the Chairman, and the Honorary Secretary of the Royal Orthopædic Hospital. As this letter has been published elsewhere, we shall content ourselves with a brief comment on its contents. The main points are (1) that the unsuitability of the site for hospital purposes is insisted upon, and (2) it is admitted that no financial advantage would result from the sale. As to the first we can only point out that the operative results could not be surpassed in any building of any other kind or in any other position. The view that a suitable hospital could be erected on the present site is, we believe, strongly held by one of our most powerful contemporaries. As to the financial aspect of the matter, we have all along maintained that to sell a freehold site of the kind would be simply disastrous. Those who have opposed the proposal to sell have advanced the selling price by £12,000, a fact which in itself entitles their continued opposition to the fullest consideration. In our opinion the migration to another site, and that a leasehold for which £500 rent would be payable, will simply add another to the hopelessly debt-laden and ruined medical charities of London. The appearance of this tardy explanation from the committee does not strengthen their position. It seems strange that the committee which turned out the old board on the question of sale has gone on for several years after an entire reversal of its policy and has waited till the sale has been virtually concluded before giving a public statement of the grounds of their action, although they have been repeatedly challenged to justify their position.

Absent-minded Medical Men.

An analysis of the voting at the recent election of a Direct Representative to the General Medical Council reveals some interesting facts. The Registrar reports that out of 23,437 possible votes 10,936 were recorded, or a percentage of 47·61. Of the voting papers returned no less than 220 arrived at too late a date to be lawfully reckoned in the enumeration. Six hundred and thirty-two were returned through the Dead Letter-Office, a fact which offers a fairly good test of the efficiency of the *Register*. Of the 10,956 voting-papers returned within the proper time 179 were invalid from various reasons. For instance, eleven were sent back in the same blank form in which they were issued; eighty-three were unsigned; fifty-one were not fully signed; seven were signed but no vote was indicated; twenty-four were improperly marked; and three stated that the voters declined to vote. A quite unexpected absence of mind is here officially recorded among members of a serious profession. It is perhaps to some extent excusable among busy and overworked men dealing with correspondence not directly concerned with their professional pursuits. At the same time, it must be admitted that medical men are not altogether free from the absent-mindedness which is an inseparable factor of the human mind.

Medical Inspection of School Children.

Matters concerning education are now attracting much attention. In the clash of political and religious opinion we fear the true aspects of education may be lost sight of. At a time when other countries are making strenuous efforts to secure the best development of "the coming race," it is most desirable that we should not neglect the hygienic and strictly medical necessities of school life. Dr. D. S. Davies, the Medical Officer of the City of Bristol, in his annual report just published has an important section on the question of medical inspection in public elementary schools. He shows that we need to "wake up" in regard to this matter. The advisability of appointing school doctors in Germany, we are told, was suggested by Prof. Virchow in 1889, and in 1900 medical inspection of schools was actually in operation in Wiesbaden, Königsberg, Nürnberg, Darmstadt, Frankfort, Dresden, and Leipzig. In 1899 the Board of Health of New York City had 250 medical inspectors for schools at a salary of 360 dollars, with a chief at a salary of 2,500 dollars, In Chicago, in January, 1900, a daily inspection was begun with fifty-six inspectors receiving fifty dollars a month, to work from 9 a.m. till 12 noon. The City of Boston is divided into fifty districts, with a medical inspector to each. Germany and America, the great progressive countries of the world, are alive to the necessity of making the health of the children a matter of first importance. We occasionally appoint a medical officer often quite unfitted for the work by training or special experience to act under the School Board and make the best arrangements he can with the Medical Officer of Health, but at best our methods are blundering, cumbersome, and to a great extent useless.

Changes on the Staff at St. Bartholomew's Hospital.

Great changes in the surgical staff are shortly to take place at St. Bartholomew's Hospital. We understand that one of the surgeons, Mr. Butlin, has intimated to the Governors his intention to retire next month. Again, in the course of the next nine months two of the present surgeons will have to resign their appointments on account of reaching the age limit, at which retirement from the active staff is rendered compulsory. Thus in this short space of time there will be three promotions upon the present assistant surgical staff, and three new assistant surgeons will be added to the staff of the hospital. Such a course of events is entirely unprecedented in the history of the institution, while it is doubtful whether any such thing has ever happened at any other hospital. St. Bartholomew's, as is well known, possesses a large and influential medical school, but it remains to be seen whether even *it* will be equal to supplying three vacancies for assistant surgeons from among its own alumni. As a rule the staff of St. Bartholomew's are always recruited from Bartholomew's men; occasionally, however, some of the appointments on the medical side have been given to alumni of other schools, as, for example, the late Dr. Matthews Duncan, while neither Sir Lauder Brunton, nor Dr. Gee, both at present physicians on the active staff, were educated at the school. A good deal of speculation is already being indulged in in respect to the possible candidates for the three coveted posts; two names are being freely mentioned in this connection, namely, those of Mr. McAdam Eccles and Mr. Bailey, the latter being the present surgical registrar.

The Electric Enema.

The use of electricity in the treatment of chronic constipation due to atony of the lower bowel has long been recognised, but perhaps never to the full extent it deserves. And, indeed, in the intra-rectal use of the galvanic current there was some inconvenience and danger if proper precautions were not adopted. The most important of these risks was the formation of eschars in the bowel, owing to prolonged current applied at one point. M. Boudet, of Paris, has, however, recently introduced a method of application which entirely does away with this risk, and at the same time accomplishes a wider distribution of the current than was possible by other methods. The apparatus used is simple, and the distinctive feature of it is the rectal electrode, which is hollow, and through which an enema of water is given before the current is turned on. The metal itself is entirely protected by rubber, so that the current of electricity only reaches the bowel after passing through the contained mass of water.

The Therapeutic Uses of Gelatine.

We have on several occasions called attention to the remarkable hæmostatic properties of gelatine when injected into the circulation or administered by the mouth. It exerts a marked effect in promoting the plasticity of the blood in the curious condition known as hæmophilia, and, according to Dr. Lancereaux, of Paris, it is also productive of benefit in albuminuria and diabetes. Unfortunately, the effect only lasts so long as the treatment is maintained, but as the doses of gelatine required are comparatively small, and as it is devoid of any collateral effects of a disagreeable nature there is no obvious reason why its use should not be persevered with in the same way as that of thyroid extract in myxœdema.

Annual Medical Service at St. Paul's.

We are requested to announce that the annual medical service at St. Paul's Cathedral, organised by the Guild of St. Luke, will take place this year on the 22nd inst., at 7.30 p.m., when the Bishop of Kensington will preach the sermon. A choir of over two hundred voices, provided by the London Gregorian Choral Association, will render the music. Members of the profession who may desire to attend can obtain tickets for the space beneath the dome by applying to Dr. S. Russell Wells, 24, Somerset

Street, W. It is hoped that wherever possible academic robes will be worn, as heretofore.

We regret to learn that Dr. James Fullerton Hunter, of Hackney Wick, has died from erysipelas following a trivial injury to the nose incurred in the endeavour to escape from a dog which attacked him when visiting a patient. It seems that he had to perform an autopsy on the body of a person who had died of gangrene on the day following the receipt of the injury, and soon after inflammation set in and ultimately caused death.

It is stated that over a hundred surgical cases are awaiting admission at the Cardiff Infirmary, many of them having been on the list for months. We have heard a good deal of the affairs of this institution of late, mostly of the nature of acrimonious discussion, but it is obvious that something more than idle debate is required to place its affairs on a satisfactory basis.

PERSONAL.

Dr. T. H. Milroy, of Edinburgh University, has been appointed to the chair of Physiology in Queen's College, Belfast.

Dr. S. J. Sharkey will deliver the first Hunterian Lecture before the Hunterian Society this (Wednesday) evening.

Dr. T. Montgomerie Alston and Dr. James Kirkland have been placed on the Commission of the Peace for Lanarkshire.

Mr. Guy Elliston has been appointed General Secretary of the British Medical Association, in succession to Sir Francis Fowke.

Professor Johannes Orth, of Göttingen, has been appointed to succeed the late Professor Virchow in the chair of Pathology at Berlin.

Dr. E. Symes Thompson, Gresham Professor of Medicine, will shortly deliver a course of four lectures in the Gresham College, Basinghall Street, E.C., on the subject of diet.

Dr. J. Spottiswoode Cameron will take the chair at the dinner of the Incorporated Society of Medical Officers of Health which is to take place at the Hotel Russell on Friday next.

Dr. H. Radcliffe Crocker has been appointed to deliver the Lettsomian Lectures before the Medical Society of London, and Sir William H. Bennett will deliver the Annual Oration.

Deputy Surgeon-General W. G. Don has resigned his appointment as one of the medical officers of the London recruiting district, a post which he has filled for the last seventeen years.

Sir William Macewen, F.R.S., Regius Professor of Surgery in the University of Glasgow, will be "the guest of the evening" at a dinner which is to be given in his honour at Glasgow on the 31st inst.

Dr. Guilleaume, of Spa, who was the physician constantly in attendance on her late Majesty Queen Marie-Henriette of Belgium, and to whom she was particularly attached, has been created by the King of Belgium a Chevalier de l'Ordre de Léopold.

Sir William Taylor, K.C.B., Director-General of the Army Medical Service, will deliver an address on "The Medical Profession in Relation to the Army," at the annual public night of the Medical Society of University College, on Wednesday, the 15th inst.

Drs. Chicote, Comenge, and Candido, Medical Officers of Health of Madrid, have received the Order of Alfonso XII. Owing to the excellent arrangements they made, Spain was kept free from bubonic plague and small-pox when these diseases had already gained a footing in Portugal. With our contemporary, *El Siglo Medico*, we tender them our congratulations on the high and deserved honour they have received.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

SCOTLAND.

[FROM OUR OWN CORRESPONDENT.]

Sale of Dundee Royal Asylum.—The directors of this institution have agreed to sell the asylum buildings at West Green to the Dundee District Lunacy Board for the sum of £90,000. At a special meeting held for the purpose of considering the matter, it was explained that the Parish Council in distributing their patients between Dundee and Montrose Asylums had made it impossible to carry on West Green without loss. The Parish Council of Dundee was the only large parish council in Scotland which had not full control of the lunatic patients of the district. When the Lunacy Board takes over the asylum there will be one rate for all private patients, and that not higher than the pauper rate.

Glasgow University.—It will be news to many that the University is owner of two-fifths of an unsaleable (and for the past ten years, unprofitable) island in the Hebrides. It shares its responsibilities as a land owner with the Glasgow Corporation, the Royal Infirmary, and the Technical College. The name of the island is Shuna—it lies to the south of Oban, about midway between Mull and Jura. The trustees brought the matter before the Court at its last meeting, asking for authority to dispose of the island. The only use to which it has ever been put is that of sheep grazing, and while at the time it was bequeathed it was believed to be worth £10,000, the only offer ever received has just reached half that amount.

St Andrews University.—Mr. Andrew Carnegie, Lord Rector of St. Andrews, has given £1,500 for a union for women students attending the University.

Glasgow Southern Medical Society.—The first meeting of the session of the above society was held on the evening of Thursday, the 2nd inst., in the rooms of the Southern Medical Club. The retiring president, Dr. Stewart, occupied the chair. Dr. C. E. Robertson, the representative of the society on the board of the Governors of the Victoria Infirmary, gave an account of the year's work of the governors, the chief item of interest being the alleged abuse of the various hospital dispensaries. Dr. Robertson stated that at a meeting of the governors, two of their number, Dr. Pollock and himself, were appointed to look into the matter. They did so, and from the dispensary books of the Bellahouston Dispensary selected twelve cases, and from the books of the dispensary attached to the Victoria Infirmary they selected nineteen cases for further inquiry. At a later meeting of the governors, however, the chairman seemed to think the proportion of cases of abuse were insufficient to warrant them proceeding farther. It was evidently overlooked that the cases selected were only a few out of many noted for a more thorough investigation. The matter unfortunately was dropped, and for the present, at least, this very clamant abuse will still continue. In the discussion which followed the president, Drs. Pollock, Miller, MacGilvray and Richmond took part. The election of office-bearers for the incoming session was then proceeded with. The following gentlemen were unanimously elected to the various posts:—Dr. Jas. Finlayson, hon. president; Dr. Duncan MacGilvray, president; Drs. Thomas Richmond and J. Fraser Orr, vice-presidents; Dr. Thomas Forrest, treasurer; Dr. Andrew Wauchope, secretary; Dr. Matthew Dunning, edit. secretary; Dr, Ralph Stockman, seal keeper; Dr. Chas. E. Robertson. representative to Victoria Infirmary; Drs. Jas. Hamilton, R. J. Carroll, and James Weir, extra members of council; Drs. John Stewart, R. H. Parry, Wm. Watson, Alexr. Millar, H. L. G. Leask, Court medical. A vote of thanks to the chairman and retiring office-bearers concluded the business.

Complimentary Dinner to Sir Wm. McEwan.—It has been arranged to entertain Sir William McEwan, M.D., F.R.S., Professor of Surgery in Glasgow University, and the recipient of a Coronation honour, at dinner on the evening of Friday, the 31st inst. It will be held in the Windsor Hotel, St. Vincent Street, Glasgow. Mr. H. E. Clark, C.M.G., late surgeon-in-chief with the Scottish National Red Cross Hospital in South Africa, will occupy the chair. Any who may wish to be present will kindly communicate with Dr. Freeland Fergus, Blythswood Square, or Mr. Pringle, F.R.C.S., 172, Bath Street, Hon. Secretaries.

BELFAST.'

[FROM OUR OWN CORRESPONDENT.]

Royal Victoria Hospital.—Election of Surgeon and Assistant Surgeon.—The vacancy caused by the resignation of Mr. T. K. Wheeler has been filled up by the promotion of Mr. T. S. Kirk, F.R.C.S., late assistant surgeon, to be surgeon. For the post of assistant surgeon thus rendered vacant there was a hard fought contest between three men, resulting in the election of Mr. Andrew Fullerton, M.D, F.R.C.S.I., by a large majority. Mr. Fullerton was a brilliant student of Queen's College, Belfast, and the Royal University, and has served as registrar at the Royal Victoria Hospital.

Consumption in Belfast.—Reference was made in this column last week to the articles on this subject promised by Mr. Robert Brown in support of his attack on the Public Health authorities of the city. These articles have now been published, and will tax all the well-known ingenuity of the municipal officers to answer. Mr. Brown begins by showing that while the death-rate from consumption in England and Wales has steadily fallen in the last thirty years from 24 to 13·5 per 10,000, in Ireland it has risen from 19·5 to 22·8. In Belfast, it is true, it has fallen a little in the last twenty years, but it still stands at 33, whereas in Glasgow it is 20 and in Paisley 18. Moreover, this fall in Belfast is probably accounted for by the great extension of the borough boundary, taking in healthy and well-to-do suburbs, where the death-rate is very small. The Medical Officer of Health said that, pending the granting of authority for compulsory notification, we were doing all we could; but I fear that now he is "sorry he spoke." Mr. Brown shows the excellent system of voluntary notification in operation in Manchester and Liverpool, which seems to prove most satisfactory in its working. The cases notified—about one-third of all occurring—are nearly all among the poorest classes, and not only do the Corporation help them in disinfecting, &c., but they send a lady visitor, who gives personal instruction in the proper precautions to be taken for the prevention of infection. In Belfast a consumptive may be three months in his grave before Dr. Whitaker hears of the case. Mr. Brown simply scoffs at Dr. Whitaker's reasons for the prevalence of consumption. We have very few slums, yet we have more consumption than Dublin; we have much less rain and fog than Glasgow or Paisley, yet we have 60 to 70 per cent. more consumption than they. As regards unhealthy trades, there is no proof that spinning and weaving as generally carried on are unhealthy, and in any case the proportion of the whole population that is employed in these trades is steadily decreasing, and is now only 10 per cent. Mr. Brown closes his vigorous attack by saying that he does not consider Dr. Whitaker solely or even mainly to blame for the present state of things, as his suggestions to the Health Committee are generally ignored, or, when accepted, are not carried out, and he instances, very aptly, the Infectious Diseases Hospital, the need of which was urged by Dr. Whitaker, and which was authorised six years ago, but which has not yet been begun. What Mr. Brown does blame Dr. Whitaker for is that he constitutes himself a special pleader for the Health Committee, and, though knowing that they are grossly neglecting their duties to the citizens, he assures the citizens that they are doing all that is possible under the circumstances.

Special Articles.

ROYAL ORTHOPÆDIC HOSPITAL.

We have received a communication signed by Lord Denbigh, the president; Mr. Richard Martin, the treasurer; Mr. Harry Marks, the chairman; and Mr. Ernest Flower, M.P., who is deputy-chairman. We do not quite understand the meaning of this belated manifesto, but presume that its object is to furnish some sort of justification for this most unnecessary sale of the hospital's site. The letter contains some expressions which amaze us. For instance, what is meant by the words "proposed sale" when the fact of sale was emblazoned and advertised in front of the hospital in Oxford Street a few days after the annual meeting? What is meant to be conveyed by the terms "comfort and efficiency," and when, so far as we are aware, no complaints on these headings are made by the patients, those most interested. Then, the querulous complaint of "one-sided statements" amuses us, seeing that the columns of the journals have been open to these gentlemen for more than two years, and the furnishing of their reasons eagerly awaited. We can only surmise that now they have sold the hospital, contrary to all sound and experienced advice, they begin to realise the great difficulties of the task before them, and in their extremity contemplate begging for help. Seeing that their chief argument was that the site was too valuable to retain, that its sale for £40,000 would produce enough to build and equip a modern hospital, and endow it with £15,000 at a cost of only £62 10s. to the hospital, they cannot ask for money for building purposes, and the request for any large sum for any purpose will at once expose the gross mistake they have made. They will be asked why they pressed through a sale which they have failed to show to be compulsory or urgent, and then go begging for assistance? Why, they will be told, did you obstinately decline to retain and develop the hospital's property, keep its very valuable site, rebuild free of cost, and gain a clear £600 a year, although you had been asking the public for £500 a year to enable you to reopen closed beds? Why have you elected to pay £500 a year rent, when you were rent free in your present splendid position? Can you or the public body which has consented to the sale show where the real interests of financial advantage to the hospital comes in through this sale? What will or can be their reply? Certainly no statement in the letter addressed to us will in the least meet these crushing objections, and the governors and public may naturally ask why this property was sold without taking the obvious and only right courses, which we pointed out, *i.e.*, to fully acquaint them of the greatly enhanced value of the property as shown by a recent sale in Oxford Street. Also of the *bona fide* offer of a rental of £800 a year, and of a scheme which was submitted to the Charity Commissioners by which the entire hospital could be rebuilt on its present site *free of cost*, leaving a balance to the good of over £100 a year. Seeing that these very important changes occurred *subsequent* to the annual meeting, most assuredly the governors ought to have been summoned to a special meeting by those desiring to sell, and matters clearly and thoroughly explained before their property was disposed of. This most extraordinary omission—which must have been purposive, as attention had been drawn to the necessity for this course by us and others—taken with the fact that the provisions of her late Majesty's charter have undoubtedly been overridden, would make a very interesting case for the law courts, to which those opposed to sale have been referred when the subject has been broached. On the latter ground, *i.e.*, breach of the charter, strengthened as it now is by the deliberate omission just pointed out, it was stated at the annual meeting that the title of the purchasers must be precarious if anyone cared to contest it, especially as the hospital is bound to suffer by the sale of its property. Much more could be said on this matter, and will be, should occasion arise. In the meantime we sincerely congratulate those who have opposed the sale. They have fought a difficult battle and rendered valuable service to the cause of wise hospital management; they have saved the hospital £12,000, and would, if permitted, have saved it very much more. All the valid arguments have been on their side, and had they possessed the sinews of war this sale would not have been permitted, and the hospitals only and very valuable property would have been retained and developed. On the other hand, we say unhesitatingly, in the public interest and those of the management of hospitals generally, that, in our judgment, this sale is quite unnecessary, very unbusinesslike, and most disadvantageous to the hospital.

PAYING PATIENTS IN FEVER HOSPITALS.

It has always appeared to us to be an extravagant anomaly that the Metropolitan Asylums Board should insist upon furnishing gratuitous accommodation for all classes of patients. It is obvious that among the inmates of their fever hospitals] there must be a not inconsiderable proportion of patients who would gladly contribute towards their maintenance in exchange for greater privacy and sundry minor comforts. By allowing them to do so segregation in hospital would be made less repulsive to such sufferers, and the burden on the rate payers would be proportionally reduced. We are, consequently, very glad to see that a motion has been carried in favour of adapting the accommodation to the requirements of the better class of patients. We cannot imagine that the Local Government Board will withhold its consent to the innovation which, though tardy, will unquestionably prove a boon to many.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

THE SCIENTIFIC ASPECT OF THE BACON-SHAKESPEARE CONTROVERSY.

To the Editor of The Medical Press and Circular.

Sir,—In obedience to editorial decision, I proceed to offer for publication in your pages a few of the remarks which I had included in my complete reply to Mr. George Stronach, regarding my views of Lord Chancellor Bacon's scientific attainments. I will first take the item of the last experiment of his life, as it involves a double claim: of martyrdom to science, and of anticipation of "frozen meat." Bacon—like all scholars of his day—was a reader of Plutarch. If there existed a way of reaching the truth in this connection, which, of course, there never has, I would not hesitate to lay a small wager that on the evening before the fatal experiment the ex-Chancellor had been whiling away time with this favourite author, and had struck the following passage (Holland's version): "One there was who demanded upon a time the reason, why the watermen who saile and row upon the river *Nilus*, provided themselves of that water which they drink, in the night, and not by day. Some said, it was, because they feared the sun, which by enchasing and heating the water, maketh it more subject to corruption and putrifaction: for whatsoever is warmed or made hot, the same is always more ready and disposed to mutation, and doth soon alter, by relaxation of the proper and native quality that it hath: whereas cold, by restraining, seemeth to contain and keep each thing in the own kind or nature: and water especially. *Now for the truth of this, that the coldnesse of water hath vertue to preserve, the snow is a sufficient testimony. which keepeth flesh a long time sweet and without corruption. . . .*" Sad it is to reflect that the famous lawyer and "founder of modern philosophy" owed his death to a mixture of scientific ignorance and puerile curiosity! If, instead of making this childish experiment on the roadside, he had driven home and asked the cook some questions, I venture to state that the latter would have enlightened him concerning a physical fact whose recognition can be traced back to the dawn of physical knowledge, and has probably been familiar to every experienced *chef* since the days when Cain founded the first city.

Your correspondent's first specimen of Bacon's "rare sagacity" is "his speculations on colour." Well might the prophetic soul of Francis Bacon cry out: "Save me from my friends!" The reader who wishes to satisfy his curiosity may turn to the third "*Century*" of the *Sylva Sylvarum*, where he will find (item 291) a "speculation" on the causes of colours of metals in solution, which it is almost painful to me to drag into the light. Commenting on the various colours of such solutions, the writer tells us that "The Cause is, for that by their Strength of Body, they are able to endure the Fire, or Strong Waters, and to be put into an Equall Posture; and again to retain part of their principall Spirit, Which two Things (Equall Posture, and Quick Spirits) are required chiefly, to make *Colours* lightsome." Contrast this distressfully childish prattle with the view of the "*divine*" old Greek of twenty centuries before; and ask whether the author of the *Timæus* was not—relatively, at least—worthy of his hyperbolic epithet. I quote from a Latin version: "Est autem color nihil aliud, quàm fulgor è singulis corporibus defluens, partes habens visui ad sentiendum accommodatas." Following this, let your correspondent, and all other readers who may feel interested. note the metrical views of the grand old exponent of the Epicurean philosophy:—

Nullus enim color est omnino materiaï
Corporibus, neque par rebus, neque denique dispar.

. . . .

Caudaque Pavonis, larga, cum luce repleta 'st,
Consimili mutat ratione obversa colores.
Qui quoniam quodam gignuntur luminis ictu,
Silicet id sine eo fieri non posse putandu 'st.
  Et quoniam plagæ quoddam genus excipit in se
Pupula cùm sentire colorem dicitur album,
Atque aliud porro, nigrum cum, et cetera, sentit,

. . . .

Having retired the famous Lord Chancellor into the dusky background, I will ask the modern physicist who has read the above quotations, What is *Newton's* "theory of colours" but a mathematical adaptation of of those propounded by Plato and Lucretius?

I suppose the "remarkable passage on attraction" is that contained in the eighth *Century* of the *Sylva Sylvarum*, which deals with the fact that "The *Turkish-Bow* giveth a very Forcible *Shoot;*" in which he points out that "short Arrows, which they call *Sprights*, without any other Heads, save *Wood*, sharpened, which were discharged out of *Muskets*, and would pierce thorow the sides of *Ships*, where a *Bullet* would not pierce." And a most characteristic specimen of Baconian "science" is added: "But this dependeth upon one of the greatest *Secrets* in all *Nature*; Which is, that *Similitude* of *Substance* will cause *Attraction*, where the Body is wholy freed from the *Motion* of *Gravity*: . . . And in these *Instances* of *Arrows*; For then the

Motion of *Attraction* by *Similitude* of *Substance,* beginneth to show itself." Whether this be the item referred to or not, all modern *scientific* readers must agree that it *is* a "*remarkable passage.*"

Closely connected with the subject of attraction, is, of course, that of gravitation; and your correspondent gives specimens from Bacon and Shakespeare which show that they had "*discovered*" that bodies—even water—fell towards the centre of the earth! In this connection, I will will give one more quotation from Holland's Plutarch. In the course of a discussion of the opinions of the old Greek philosophers, an interlocutor remarks: "Hold not they that the earth is as round as a ball, . . . affirm not they that there be antipodes dwelling opposite one unto another, . . . and would make us believe, that if bars and masses of iron weighing a thousand talents a piece, were let fall down into the bottom of the earth, when they came once to the middle centre thereof, will stay and rest there, albeit nothing else came against them, nor sustained them up?" The acquisition of such knowledge, common to the Greek philosophers of twenty-five centuries ago, tends to diminish the originality of the inspiration of Newton's *apple.* I will here close my epitome.

I am, Sir, yours truly,
John Knott, M.D.

34, York Street, Dublin, October 2nd, 1902.

SUDDEN DEATHS AND NUX VOMICA.

To the Editor of The Medical Press and Circular.

Sir.—The public at large as well as the medical experts must have noticed the increase in sudden deaths in later years. This phenomenon is not peculiar to any clime or country. It seems to pervade civilised communities. The Queen of the Belgians and the Boer general, Lucas Meyers, stand out in relief as within recent weeks. Every practitioner must have observed cases in his experience. The subject has been somewhat delicate with heart, stomach, or other trouble. had occasionally or habitually taken medicine of a tonic nature without marked apprehension, takes a weakness or a fit and is dead in a few moments, or is found dead in bed. Such is the common history, and the verdict is heart failure. Well, I say it is only the rarest exception that occurs to the rule; that the heart never fails without giving marked premonition unless during a fit or the system is affected by a drug. In nux vomica we have such a drug. This is a medicine which is constantly and universally prescribed. Its action, though not the substance, is cumulative, *i.e.*, a smaller dose after a period of its use will produce a greater or more intense action than a larger at the inception. Its use for a time induces spasms of the heart and muscles, especially at night. It induces a condition which I have known to be diagnosed as angina pectoris. Continued, it induces vomiting some time after meals, and the most disagreeable of all, this drug, which passes as an antidote to alcohol, begets a condition of the senses and system utterly intolerable of alcohol. Let a patient be placed on small doses of strychnia for a month or more, and this drug, which will apparently produce great benefit, at an early period will prepare the way for the smallest dose of the beverage bringing on a most miserable state, lightness in head, spasm of heart, trembling of limbs, cold waves along the back and limbs, sighing and sinking feeling at stomach &c. There is scarcely a pill or mixture advertised that does not contain this drug. Every practitioner prescribes it almost daily because of its bitterness increasing, like all bitters, the gastric juice, and because of its contractile influence over the intestinal muscular coat, without thinking of the spasmodic habit induced and the dangerous polarity and irritability produced in the central nervous centres, as well as in the organic ganglia. I am satisfied that the increase in the sudden deaths is not solely due to nux vomica, but I believe a percentage of them is.

Nux vomica is a dangerous drug; the action intended by the therapeutist can be obtained more securely by other agents, and it is monstrous that this deadly substance can be put up in syrups and preparations and purchased at will by the public.

I am, Sir, yours truly,
John Roche.

Kingstown, October 1st, 1902.

THE BACTERIOLOGICAL TEST IN DIPHTHERIA.

To the Editor of The Medical Press and Circular.

Sir,—I should be glad if any of your correspondents could give me some idea of the dependence to be placed on this test as a means of diagnosis in cases of diphtheria, as it has happened to me from time to time to have them returned in which I have notified diphtheria as tonsilitis, and as these cases are detained at the hospital for a greater or less period of time, I infer there must be some obscurity as to the diagnosis even in official sources. For example, within the last few days I have had a case returned which I notified on the 25th ult. and which, according to the notice-board, he discharged on the 4th, but in the same house and in the same family I have notified three other cases of diphtheria, which occurred almost immediately preceding the case in question, and of which I have heard nothing; and in the first of these four cases I obtained a bacteriological test, but relied upon naked sight in the diagnosis of the remaining three. It therefore strikes me as a curious coincidence that three cases of diphtheria should occur in the same house, but that the fourth, the symptoms being likewise referable to the throat, should be one of simple tonsilitis. I have written to the medical superintendent, pointing out this case, and suggesting as an aid to diagnosis that the medical officer should have record of any case that may occur in a house at the same time; as it occurs to me, seeing the dimensions of the Infectious Hospital, and the manner in which cases are scattered amongst different branches, the multiplicity of the disease in the same house might be lost sight of. I could enumerate two or three other curious notifications, but your valuable space forbids.

I am, Sir, yours truly,
Inquisitor.

London, October 5th, 1902.

Obituary.

MR. EDWARD McMILLAN, OF WEIR.

We regret to announce the death of Mr. E. McMillan, L.R.C.S., which took place on the 26th ult., at Lockerbank, Bridge of Weir, near Glasgow, from cardiac disease, at the age of seventy years. He had retired from active professional work, but for over forty years was a busy practitioner in Glasgow, on the south side of the river Clyde. He was of a genial and happy disposition, and much esteemed by his patients and professional brethren alike. At the meeting of the Southern Medical Society held a few evenings ago, reference was made in very feeling terms by the President to Mr. McMillan's death and it was unanimously agreed to send a letter of condolence to the bereaved family. His son, Dr. William McMillan, has succeeded him in practice.

DR. H. DAGONET, OF PARIS.

The death is announced of Dr. H. Dagonet, of Paris, at the ripe age of eighty years, after a long and painful illness. He was honorary physician to Saint Anne's Asylum, Professor of Medicine in the Strasbourg School of Medicine, and the most distinguished French psychologist. Henri Dagonet was born in 1823 at Chalons-sur-Marne; in 1840 he obtained his M.D. Paris, by a thesis on mental diseases. In 1858 he was elected a corresponding member of the Medico-Psychological Society, of Paris. Numerous honours followed from other French medical societies. He was a voluminous writer, and the majority of his contributions on his own speciality were translated into German, Spanish, and Russian.

MR. WILLIAM BIRD, OF HAMMERSMITH.

On Saturday last there passed away at a ripe age, at his residence, Bute House, Hammersmith, Mr. William Bird, F.R.C.S.Ed., M.R.C.S.Eng., whose declining years were made especially bright with the knowledge of the great esteem in which he was held by his brother practitioners, and the frequent visits paid by them to him. He was one of the founders, a Vice-President, the Chairman for many years, and a Consulting Surgeon of the West London Hospital. He was also a Justice of the Peace and a contributor of various papers to the medical journals. His funeral is arranged for to-morrow (Thursday), and it is expected that a large number of the profession will attend as a last mark of respect.

Literary Notes and Gossip.

Those of our readers who are interested in forensic medicine would do well to read Sir Robert Anderson's article, in the *Nineteenth Century and After* for October, on "Professional Criminals."

⁂

The *Empire Review* for October contains some suggestive notes on Life Insurance without medical examination, which medical men acting as advisers to assurance offices would do well to consider.

⁂

Professor Woods Hutchinson, whose work in comparative pathology is well known on both sides of the Atlantic, contributes an attractive sketch—"A Naturalist's Picnic on the Oregon Coast"—to the current number of the *Contemporary Review.*

⁂

The current number of the *Medical Temperance Review* contains a full account of Sir Victor Horsley's interesting speech at the Annual Medical Breakfast held in connection with the British Medical Temperance Association's gathering at Manchester.

⁂

Dr. A. E. Harris has furnished us with a copy of his quarterly report on the health and sanitary conditions of the metropolitan borough of Islington. It is a rich mine of statistical tables, and contains many interesting data concerning a large and important section of the metropolis.

⁂

"A Manual for Assistants' Examination, Apothecaries' Hall," by Mabel F. Stanley, is a most excellent little work, and cannot fail to prove very useful to those for whom it is written, namely, students working up for the Assistants' Examination of the Society of Apothecaries. The information is very clearly and concisely given, and the matter is so arranged as to be easily grasped by the student.

⁂

Dr. E. Hugh Snell, Medical Officer of Health for Coventry, in an interesting report on the isolation and treatment of diphtheria, shows that sixteen hospitals admit membranous croup unreservedly, and forty-six others admit urgent cases or cases where surgical interference may be necessary. It certainly seems a surprising fact that in these advanced times sixty-two out of sixty-eight of the largest general hospitals in the country should still admit such cases. Dr. Snell's report should be consulted by all medical officers of health.

⁂

The "Fish River Bush, South Africa," by W. T. Black, M.R.C.S. and S.A. (Young J. Pentland), is a reprint of a series of articles on the Fish River Bush of Cape Colony, written between the years 1848 and 1852. One can scarcely realise that at such a comparatively recent period such a wild country could exist on the fringe of civilisation; vast areas of land covered with impenetrable bush, with no roads, except those made by the elephant or the larger kinds of buck. Within these recesses hordes of savages have quite recently lived, and such animals as the elephant, the rhinoceros, and the leopard have been seen almost within the memory of the living. It is an interesting and very readable little book.

⁂

The man of law and the man of medicine have many points in common. There is a legal side of medicine as well as a medical side to law. Of recent years many have sought to serve two masters, and between the pursuit of justice and the following of healing have in only too many instances found happiness in neither, mainly because each demands a life's service. But it is right and proper that the man of blood and the man of tape should exercise mutual regard, and extend to each other a respectful yet brotherly support. We therefore cordially recommend our readers not to miss an opportunity of perusing Mr. Hugh H. L. Bellot's charming new work on "The Inner and Middle Temple," and its rich store of legal, literary, and historic associations.

⁂

Dr. Oscar Jennings has done real public service by setting forth so ably and reasonably "The Cure of the Morphia Habit." Both doctor and patient are too apt to consider that there is no cure for this habit, and there is often no strenuous effort on the part of either to combat it. Dr. Jennings weans the patient from this disastrous habit with the smallest amount of suffering. Slow and sure, and comparatively painless is his method. The patient must absolutely obey his doctor. All the circumstances of his life must be carefully arranged, the general health considered, especially the digestion, and the morphia gradually relinquished; Turkish baths often alleviate the troublesome restlessness; bicarbonate of soda relieves the craving, and heart tonics are generally necessary. Cocaine, codeine, and derivates of morphia, such as heroin, are equally prohibited with morphia itself.

⁂

Something more than literary experience is needed to review such a work as that which bears the ambiguous title of "The Cocktail Book" (Macqueen, London). It is described, by the writer, as "a recipe book compiled for private use," in other words, it is written with the object of enabling a gentleman to provide his friends with any of the standard beverages, mixed in an acceptable manner. Without offering any opinion on the salubrity of indulging in these manifold "mixed drinks"- that belonging by right to another department—we note that Angostura Bitters enter into the composition of a large proportion, if not indeed the majority thereof. We have heard Worcester Sauce described "as an English device for giving the same taste to everything," but, in truth, this would hardly apply to the promiscuous use of Angostura Bitters, since their delectable bitterness is so blended and disguised in the formulæ here set forth, as to possess chameleon-like versatility of flavour. Amphitryons with alcoholic proclivities cannot do better than procure this little formulary, if only to relieve a vicious monotony.

Literature.

BASTIAN'S STUDIES IN HETEROGENESIS. (a)

This is the second instalment of these memoirs, the first part having been reviewed in these columns several months ago. The new work continues and amplifies the observations previously recorded, and ranges over a wide field, including the origin of various protozoa from sources as far apart biologically as bacteria and rotifer eggs. The observations are very fully recorded and illustrated by a series of beautiful, if not over-convincing, micro-photographs.

We feel that little can be added in a general sense to our review of Part I. We have, however, undertaken a few control experiments to test the validity of the author's conclusions as to the origin of monads from the pellicle of hay infusions. In dealing with this Professor Bastian describes and photographs a series of appearances found in hay infusions which have formed a distinct pellicle, whereby groups of bacteria become converted into flagellate monads, fungus spores, or amœbæ. A hay infusion was made and divided into two parts, one of which was kept in a shallow glass dish exposed to the air, and the other preserved in a flask with a cotton stopper. The latter was sterilised by boiling on four successive days, and thereafter remained pellucid in the incubation after several days. In the other half bacteria soon made their appearance, and cultures were made from the pellicle before any monads could be seen. A few days afterwards numerous monads were present, and the bacteria having been separated by plates, the sterile infusion was inoculated from the several different colonies, and although the bacteria multiplied rapidly, forming a thin pellicle, and microscopic examinations were repeatedly undertaken, no monads were discovered, nor have been up to the present, more than two months since the inoculation.

(a) "Studies in Heterogenesis." By H. Charlton Bastian, M.A., M.D. Second Part, with 244 illustrations from photomicrographs. 7s. 6d. London: Williams and Norgate. 1902.

The objection lies ready to hand that the number of controls was not extended enough, and this is quite true, but we only wish to show that Professor Bastian would do a real service if he would repeat his experiments with pure cultures of bacteria, or mixtures of pure cultures, and publish the results. The ubiquity of monads and fungus spores is so aggravating an everyday occurrence to the working bacteriologist that it is not astonishing if Professor Bastian's observations be received with the gravest incredulity.

Of the numerous other theses maintained in the memoir some are bacteriological problems, and should be capable of being repeated under known conditions, as has been attempted above. Others are concerned with the transformation of various protozoa into each other, or the transformation of ova of higher forms into protozoa, and in either case such problems are problems of cell-morphology and must be studied as such. Until Professor Bastian or some other authority shows how the cell organs of the derived forms arise from those of the pre-existing cell, zoologists are justified in regarding the observations detailed in the second part of this memoir with suspicion when they come in conflict with facts which form the very basis of modern biology.

FAGGE'S TEXT-BOOK OF MEDICINE. (a)

The second volume of this magisterial text-book deals with diseases of particular systems, commencing with diseases affecting the respiratory tract. The pathological status of pneumonia does not appear to have undergone any change, its etiology remains as obscure as ever, and the pneumococcus is only accorded a provisional relationship to the disease. The unity of phthisis, on the other hand, is formally proclaimed, thus breaking away from the teaching of which the late Sir Andrew Clark was the last exponent, that there were forms of phthisis other than tuberculous. There is a certain aloofness in the authors' remarks on the climatic treatment of the disease which seems to indicate but a qualified confidence in the method now so prominently before the public; indeed, with the exception of cod-liver oil, no medication or system of treatment is referred to in terms calculated to inspire confidence, or even hope, and the text is little more than a recital of the numerous means employed without anything to guide the neo-practitioner in his choice of remedies. The clinical description of the disease and the bearing of the various etiological factors are admirable, and the quotation in verse which heads the chapter—a novel feature in medical works—is a marvel of accurate observation:—

> "While meagre Phthisis gives a silent blow,
> Her strokes are sure, but her advances slow;
> No loud alarms nor fierce assaults are shown,
> She starves the fortress first, then takes the town."
> —*Garth.*

Under the title "Pneumonoconiosis" is described the chronic pulmonary catarrh, culminating in tuberculosis, due to the inhalation of irritating particles of dust, "miner's lung," "knife-grinders' consumption," and the like. There is an important chapter on mediastinal growths which practitioners would do well to study, comprising as they do a group of affections of exceeding gravity and of difficult diagnosis.

The chapter on Diseases of the Heart is a monograph in itself. After an interesting historical review of the progress of auscultation, as applied to this organ, the authors discuss the significance of tachycardia and bradycardia, distinctive phenomena which, though comparatively common, have only been accorded adequate attention of recent years. The authors carefully avoid devoting much space to the discussion of the significance and causation of certain much-debated murmurs. The treatment is very fully described, and one feels that in this department Dr. Pye-Smith is writing from the fulness of his experience.

Under the head of "Diseases of the Alimentary Tract" it is interesting to note that the term "typhlitis" is used, to the exclusion of appendicitis; the latter, indeed, does not even figure in the index, the author holding "the barbarous name, appendicitis," to be unnecessary and misleading, since, as taught by Addison and Willis, all typhlitis begins in the appendix. Incidentally, the author enters a protest against the name "perityphlitis," on the ground of its ambiguity and the fact that its use implies the erroneous belief that suppuration behind and around the cæcum may arise independently of disease of the appendix. We commend these views to the eminent practitioners who are responsible for its employment in announcing the nature of the King's recent illness to the public. We apprehend, however, that "the barbarous name" has come to stay, all scholarly protest to the contrary notwithstanding. It has now fallen into the public domain, and will probably resist all attempts to stamp it out.

In the chapter on "Diseases of the Blood," the authors are curiously reticent in respect of the prophylactic and curative treatment; in fact, no reference whatever is made to the value of chloride of calcium or gelatine in promoting the plasticity of the blood, although virtually these are the only remedies which possess any influence at all in combating the hæmorrhagic diathesis.

The only fault we have to find with the work is the absence of the personal element. It is well to be made acquainted with the views of authorities on this or that subject, but one yearns for a little guidance, a suggestion here and there, as to the value which the authors accord to the hypothesis or deduction under consideration. Practitioners, moreover, would doubtless be glad of more detailed directions for treatment. A multiplicity of remedies without any hint as to the author's own results with their use is rather confusing than otherwise, though, in fairness, we must admit that the authors err rather on the side of reticence in the domain of therapeutics. The object of medicine is curative rather than diagnostic, and diagnosis is vanity unless it be associated with adequate directions for treatment. This important work deservedly occupies an unique position in English medical literature, a position largely due to the authors' extensive experience and special literary aptitudes.

KEAY ON GALL-STONES. (a)

This little volume is a well-written monograph upon the medical treatment of gall-stones. It contains an excellent summary of knowledge upon this important subject, together with the result of considerable personal experience of the author in the same direction. The style is concise and the reasoning close, as shown by the following passage:—"When Mayo Robson affirms that gouty people are more liable to gall-stones because they do not eat nitrogenous food, there are two reasons against accepting his conclusion: First, it has been by no means proved that gall-stones are a special property of gouty people; secondly, though it might under certain circumstances be expedient for those who suffer from gout to limit their consumption of meat, as a matter of fact we do not find that they do so." The writer is not so happy, however, when he goes on to argue: "If gall-stones are the result of living on non-nitrogenous food, what shall we say of India and other tropical countries, where the inhabitants subsist on a diet that is practically non-nitrogenous, and yet scarcely ever suffer from gall-stones." We should like to know on what authority Dr. Keay advances the last statement, which meantime we receive with a considerable amount of reserve. The author discusses the question of operative interference fairly, while at the same time he speaks firmly about the evil of indiscriminate operation. In one case the formation of gall-stones was not stopped by two operations, in both of which large numbers of gall-stones were removed, and in the latter the gall-bladder itself was taken away. The writer has little or no faith in olive oil as a remedy, but that opinion is certainly not shared by many physicians of experience. On the whole this is a valuable little book on a subject of everyday interest to all who practice medicine.

(a) "A Text-book of Medicine." By Charles Hilton Fagge, M.D., F.R.C P., completed and revised by P. H. Pye-Smith, M.D., F.R.S., L.R.C.P., Consulting Physician to Guy's Hospital. Fourth Edition. Vol. II. Price 21s. London: J. and A. Churchill. 1902.

(a) "The Modern Treatment of Gall-stones." By J. H Keay, M.D London: Rebman, Limited, 1902.

RAYNER ON THE CARE OF THE TEETH. (a)

If the author of this pamphlet before publication had consulted the members of the dental profession whose names he mentions, it is extremely improbable his pages would have seen the light. These gentlemen would have strongly objected to the not very oblique puff he provides for them, especially as their merits are referred to in company with those of "Oriental Tooth-powders," "Californian Syrup of Figs," and other similar compounds not enumerated in official or recognised pharmacopœias. If the author knows very much about the status and constitution of the dental profession, and the subject of dental prophylaxis, he has not made his knowledge very manifest, nor put it in a form easily to be understood by the popular reader whom he addresses. We venture to affirm that the public will not buy the pamphlet, nor will they read it with attention, even if presented to them gratuitously. The author, with the very best motives, has made a mistake; and this, we feel sure, he will himself, on consideration, fully recognise.

THE ELIMINATION OF DRUNKENNESS. (b)

"The fundamental fact at the bottom of the drink question is the physiological action of alcoholic liquors on the animal organism." Such is Dr. Shadwell's contention, and he is surely right. The evils of intemperance are so widespread that everyone claims a right to tender evidence. But prejudice and ignorance hamper a clear understanding of the position. Probably no body of men has a better right to be heard on this matter than the medical profession. Dr. Shadwell certainly writes from intimate knowledge of his subject. Although not altogether free from bias, and in some measure fettered by theoretical considerations, he has admirably succeeded in presenting an intensely interesting and remarkably suggestive study of drunkenness. He has carefully unravelled the records of the past, and believes that there has been a distinct decline in drunkenness. We think the best medical opinion will not uphold Dr. Shadwell that, "so far from women having recently taken to frequenting the public-house, they have never frequented it less." Certainly those in the best position to know are clear as to the marked increase of alcoholism among women. Dr. Shadwell very ably marshals the forces making for temperance and those for intemperance. We fear, however, that he has allowed himself to be swayed unduly by the attractive theories of Dr. Archdall Reid. The section on the principles of liquor legislation is particularly clear and logical, and the study of "the Scandinavian System" is remarkably able. The chapters dealing with the English public-house and the model ale-house admirably illustrate Dr. Shadwell's command of picturesque and incisive English. The section on habitual inebriates is too brief to be of much value. Dr. Shadwell's work is a serious contribution to a particularly difficult and peculiarly perplexing subject. It is by no means a complete or exhaustive presentation of the case. With many of the author's conclusions we are in most thorough agreement, but with much we feel bound to differ. Dr. Shadwell is outspoken; he does not hesitate either to praise or to blame. In many instances we think he is unfair to those with whom he is not in agreement. But in spite of all limitations and all shortcoming, Dr. Shadwell has succeeded in presenting his subject in a notable work, and we have no hesitation in saying that it should be seriously studied by all classes of the community.

Medical News.

The New Veterinary College for Ireland.

The new Veterinary College, which was opened on Wednesday last by the Lord-Lieutenant, is closely connected with the medical profession. The scheme for its foundation was first formulated in 1894, and prominent among the promoters are to be found the names of the late Dr. Haughton, Professor Cunningham, and Sir Christopher Nixon, while the last-named has also received the honour of being the first President. The President, in welcoming his Excellency at the opening ceremony, gave an interesting account of the foundation of the College, and one which shows how much the veterinary surgeons in Ireland will in future owe to private generosity as well as to State assistance. Although the College was only formally opened last week it has received students for the past three years. In the first year of work there were thirty, in the second year fifty-eight, and this year there promise to be about eighty. Professor Mettam, the Principal, was wisely sent by the Governors to inspect the leading continental veterinary schools before the new building was commenced and, in consequence, the College is equipped in accordance with the necessities for the practice of the most modern veterinary surgery. The importance of the relation of veterinary to human medicine is being more and more recognised every day, and we confidently look forward to discoveries in the newly-created College that will still more strongly emphasise that importance, and will prove of the highest value in furthering a solution of the many difficult problems which still delay the progress of human medicine.

London Hospital Medical College.

The following is the result of the examination held for the entrance scholarships:—Price scholarship in science, value £120, Mr. R C. Roberts; scholarship in anatomy and physiology, value £60, Mr. J. T. Macnab; entrance science scholarship, value £60, Mr. S. J. A. Beale; entrance science scholarship, value £35, Mr. H. Morgan; entrance science scholarship, honorary certificate, Mr. H. R. Davies.

Charing Cross Hospital Medical School.

The following entrance scholarships have been awarded:—The Livingstone scholarship (100 guineas) to Mr. W. S. Fenwick, the Huxley scholarship (55 guineas) to Mr. E. Quirk, and a Universities scholarship (72 guineas) to Mr. R. K. Shepherd. Entrance scholarships have also been awarded to Mr. F. Butler (60 guineas), Mr. T. Hallinan (40 guineas), Mr. F. E. Sprawson (30 guineas), and Universities exhibitions (each 36 guineas) to Mr. J. W. Evans and Mr. R. S. Taylor.

The Medical Sickness and Accident Society.

The usual monthly meeting of the committee of the Medical Sickness, Annuity, and Life Assurance Society was held on 26th ult., at 429, Strand, London, W.C. There were present Dr. de Havilland Hall (in the chair), Dr. J. B. Ball, Dr. Walter Smith, Mr. Wm. Thomas, Mr. Wm. J. Stephens, Dr. F. J. Allan, Dr. M. Greenwood, Mr. Frank Wallace, and Mr. Edwd. Bartlett. The sickness experience of the summer has been unusually high, a large proportion of the claims having arisen from accident. Of these more than half have occurred in connection with wheeling, and some of them have caused serious injury, totally incapacitating the member for a lengthy period. In one case, in which the member has been thrown from a tricycle, there is some reason to fear that permanent injury has resulted. In spite of this the funds of the Society are growing very rapidly, now amounting to over £160,000. The number of members is also growing in a satisfactory manner, as the fresh entrants each year are considerably more numerous than the deaths and lapses. As the Society pays nothing for advertisements, the new members are generally introduced by those who have had personal experience of the advantages obtained from membership in the Society. Prospectuses and all information on application to Mr. F. Addiscott, Secretary, Medical Sickness and Accident Society, 33, Chancery Lane, London, W.C.

(a) "Rules to be Observed in the Care of the Teeth." By John Rayner, L.R.C.P., Surgeon, &c., formerly Resident Medical Officer Charlton Dispensary, Manchester; Surgeon Warwick Cottage Hospital; late Visiting Surgeon Exmouth Dispensary. Exmouth: H. S. Eland, The Library.

(b) "Drink, Temperance, and Legislation." By Arthur Shadwell, M.A., M.D., Oxon. London: Longmans, Green and Co. Pp. 304. 1902.

Penalty for Contravention of Lunacy Acts.

Mrs. Roach, proprietress of the Alexandra Nursing Home, Tollington Park, was, on Saturday last, fined £20 and costs for receiving certain alleged lunatics in an unlicensed house. A visit of a Commissioner in Lunacy revealed the fact that the "Home" contained eleven patients, nine of whom showed signs of mental derangement, two being "certifiable." The accommodation was exceedingly inadequate, there was no medical supervision, and a strait-jacket was found on the premises which had been made use of. Under the circumstances the penalty inflicted must be regarded as erring, if anything, on the side of indulgence, for a more flagrant violation of the Lunacy Acts it would be difficult to imagine.

Presentation of an address by the Royal College of Physicians of Ireland to the New Viceroy.

On September 30th the following address was presented to the Lord Lieutenant by a deputation consisting of the President and Fellows of the Royal College of Physicians, who waited on him for that purpose. Her Excellency the Countess of Dudley favoured the deputation by her presence at the presentation.

To His Excellency, William Humble Ward, Earl of Dudley and Viscount Ednam, Lord Lieutenant-General and General Governor of Ireland.

May it Please Your Excellency—

We, the President and Fellows of the Royal College of Physicians of Ireland, desire to approach your Excellency upon your arrival in this country as the representative of his Most Gracious Majesty the King, with a cordial welcome and an expression of our devoted attachment to the Throne. We take this opportunity of once more congratulating our Gracious Sovereign on his Providential recovery from his recent dangerous illness, and we venture to express our respectful and earnest hope that King Edward will be able, at no distant period, to visit in person his Kingdom of Ireland and its capital, when he will, no doubt, receive that hearty welcome which has never been wanting on those auspicious occasions on which his predecessors have visited their Irish subjects. The Royal College of Physicians of Ireland, founded in 1667, received, in 1878 and 1890, additional powers from the late Queen Victoria. The President and Fellows of the College have ever been mindful of the great and important functions entrusted to them, both by her late Majesty and by her Royal predecessors, King Charles II. and King William III. and Queen Mary. The President and Fellows have at all times sought to further the advancement of medical science, and to secure a succession of highly educated physicians for the service of the State. A considerable number of medical officers in the Navy and Army hold the diploma of this College, whilst most of those holding the position of medical officer under the Poor-law system in Ireland are also Licentiates of the College. The President and Fellows from time to time have placed their services at the disposal of the Government, more particularly in devising and giving effect to measures bearing upon the public health, and on the present occasion they desire to assure your Excellency of their readiness, now as in the past, to afford to his Majesty's Government their hearty assistance in all matters relating to medicine and the health and welfare of the people. His Excellency, after thanking the representatives of the Royal College for its address, and promising to convey to the King their congratulations upon his providential recovery from his recent dangerous illness, remarked that the recovery itself was, humanly speaking, a very remarkable tribute to the profession in which they were engaged. The honourable history and achievements of the College which they represented, the work in which that College has been engaged for the last 200 years was second to none in social importance, and its success is a matter of common knowledge. Not only in Ireland, but through the whole of the English-speaking world physicians holding the diplomas of that College occupy positions of the highest importance and responsibility, and he had no doubt that it would maintain and increase the reputation which it has already gained, and continue to send out a succession of highly trained men prepared to combat the different forms of disease, and supplied with all the resources which science in these days provides.

Infection by Flies.

At an inquest held a few days since at Fratton, near Portsmouth, it was elicited that an epidemic of diarrhœa of a virulent type has been raging in the district, which was attributed by the medical officer of health to infection carried to the houses by flies from municipal refuse heaps in the neighbourhood. The Corporation has been asked to provide a destructor to obviate this ever-present nuisance, but has turned a deaf ear on the ground of expense. Surely there must be a means of constraining Corporations to abstain from creating a nuisance which is also very dangerous to health. A little progging of its pachydermatous hide by the Press would, perhaps, assist in attaining the object in view.

Pass Lists.

Society of Apothecaries of London.

At the Primary Examination (Part I.), October 1s and 2nd, the following candidates passed in:—

Biology.—F. M. Cunningham, R. J. W. McKane.

Chemistry.—P. A. Sullivan.

Materia Medica and Pharmacy.—C. E. Adams, C. E. Pring.

Primary Examination (Part II.), September 29th, October 1st and 2nd:—

Anatomy.—H. M. Langdale, W. S. Mitchell, E. Moir.

Physiology.—C. Homer, W. S. Mitchell, S. K. Poole, J. W. Rollings.

The Royal University of Ireland.

The second examination in Medicine, Autumn, 1902. The examiners have recommended that the following candidates be adjudged to have passed the above-mentioned examination:—

Upper Pass:—*James S. Dickey, James Donnelly, *David H. C. Given, *Robert Jameson, Sch., James Magill, Michael Shipsey. Those marked with an asterisk may present themselves for the further examination for honours.

Pass; James W. Allen, Herbert W. Carson, John Devane, John Finnegan, Robert S. Kennedy, William J. Leighton, Andrew Leitch, Robert J. Lytle, William T. McCutcheon, William McKee, Timothy Meagher, Michael J. O'Grady, John J. O'Reilly, Maurice A. Power, Gabriel V. Ryan, Patrick Steen, John P. Waters, Thomas West, Jemima B. White.

The Examiners have also recommended that the following candidates be adjudged to have passed in Anatomy and Physiology:—Henry J. Burke, Arthur G. Cummins, Timothy O'Driscoll, Maurice P Scanlon, William M. Woods.

Conjoint Examinations in Ireland.

The following candidates have passed preliminary examination as undernoted:—

A: Honours (in Order of Merit).—R. de S. B. Herrick, W. H. Bomford, E. B. Palmer.

B.: Pass (alphabetically).—O.H. Bowen, R. J. Brookes, H. C. Carden, J. T. Conway, M. E. Cussen, E. H. Daly, P. G. M. Elvery, R. S. Graham, F. M. Hewson, W. E. M. Hitchins, G. J. M. Martin, E. Montgomery, W. M'Bride, E. T. M'Cabe, J. E. M'Donogh, W. R. O'Farrell, D. J. Stapleton, A. D. Woolf, J. Zlotover.

Notices to Correspondents, Short Letters, &c.

☞ **Correspondents** requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

MEDICAL TERMS IN THE LAY PRESS.

The representative of the *Fourth Estate* is often befogged by the technicalities presented by medical science. Even the *Daily News* suffers from the same complaint. In referring to Professor Welch's luminous lecture on "Immunity" it informs the listening world that "the subject of the lecture, which was purely technical throughout, was '*Humanity.*'" And in a way, perhaps, the pressman was not far wrong.

Mr. R.—"Musset's sign" is a jerky, rhythmical oscillation of the head met with in the subjects of aortic disease, and is especially well marked in aortic aneurism. It has been observed in a certain number of cases but does not appear to be invariably present, so that its diagnostic value is not very great.

TO MASK CASTOR OIL.

A Russian physician suggests the following formula as a means of overcoming the drawbacks of that otherwise useful purgative, castor oil:—Castor oil, 2 ozs.; menthol, 8 grs.; tincture of iodine, 10 minims. We can quite imagine that the taste of the oil is masked by these additions, which, moreover, have the advantage of acting as intestinal antiseptics.

Mr. F. Laurence will find the matter has been already referred to in our last issue.

THE ETHICS OF ADVERTISING.

The proprietors of "Odol," a fashionable dentifrice, are anxious to point out to the medical profession that extensive advertisement of such an article is not incompatible with real merit, and in no wise detracts therefrom. Their object, we are told, is "simply to educate and to enlighten the public on the urgent necessity of a proper care of the mouth and teeth, founded upon strictly hygienic principles." We do not suppose that medical men are likely to take umbrage at a publicity which is quite in accordance with the spirit of the times; indeed, if the proprietors of "Odol" pushed matters to the extent of sending each member of the profession a bottle of the dentifrice we do not suppose that many would feel it incumbent upon them to return it.

Meetings of the Societies, &c.

Wednesday, October 8th.

Obstetrical Society of London (20, Hanover Square, W.).—8 p.m. Specimens will be shown by Dr. Lewers and others. Short Communication: A Uterus showing Rapidly Growing Epithelioma of the Cervix, Death from Recurrence five months after Removal. Paper:—Mr. J. W. Taylor: Complete Inversion of the Uterus of Seven Months' Duration, Failure with Repositors, Anterior Vaginal Cœliotomy, Anterior Uterotomy and Replacement, Recovery.

Hunterian Society (London Institution, Finsbury Circus, E.C.).—8.30 p.m. Dr. S. Sharkey: The Cardiac Muscle from a Clinical Point of View. (First Hunterian Lecture.)

Dermatological Society of London (11, Chandos Street, Cavendish Square, W.). 5.15 p.m. Demonstration of Cases of Interest.

Thursday, October 9th.

British Gynæcological Society (20 Hanover Square, W.).—8 p.m. Specimens will be shown by Professor J. W. Taylor, Mr. B. Jessett, and Dr. Macnaughton-Jones. Papers:—Mr. Jessett: "Some Complications arising subsequently to Cœliotomy." Short Communication:—Professor Taylor: A Case of Uterus Bicornis with Rudimentary Right Horn.

Friday, October 10th.

Clinical Society of London (20, Hanover Square, W.).—8.30 p.m. Papers:—Dr. L. Guthrie and Dr. F. E. Batten: On Unilateral Atrophy of the Optic Nerve associated with Hemiplegia of the Opposite Side. Dr. A. Francis (Brisbane) (introduced by Dr. G. MacDonald): The Nasal Treatment of Asthma. Mr. A. W. Mayo Robson: Ruptured Crucial Ligaments and their Repair by Operation.

Dr. Purves Stewart will give a Clinical Demonstration on some Neurological Cases at Westminster Hospital on Tuesday next, at 4.30 p.m., in connection with the Post-Graduate course at that Institution.

Appointments.

Culross, J., M.A., M.B., C.M. Glasg., Medical Officer to the Cottage Homes of the Newton Abbot Union, Devon.

Duffett, Henry A., F.R.C.S. Medical Officer to the Greenwich Union Children's Home, New Eltham.

Gardner, A. Josephine, M.B., Ch.B.Edin., Resident Medical Officer in the Bruntsfield Hospital for Women and Children, Edinburgh.

Gough, John Harley, M.D., F.R.C.S Edin., Admiralty Surgeon and Agent for Torquay and Babbacombe.

Hayman, C. A., M.D St.And., F.R.C.S., F.R.C.P.I., L.D.S.Eng., Hon. Assistant Dental Surgeon to the Bristol Royal Infirmary.

Holmes, J., M.D.Edin., Certifying Surgeon under the Factory Act for the Bury District of the County of Lancaster.

Johns, H. D., M.D.Durh., Medical Officer of Health for the Hornsea Urban District Council.

Raw, Nathan, M.D., M.R.C.P Lond., F.R.S.E., D.P.H., Physician to the Sanatorium for Consumption at Heswall, Liverpool.

Renshaw, Knowles, Assistant Physician to the Manchester Hospital for Consumption and Diseases of the Throat and Chest.

Sadler, F. J., M.B., B.Ch.Oxon, Medical Officer to the Barnsley Corporation.

Smith, J. F., M.B., M.S.Edin., Certifying Surgeon under the Factory Act for the Whithorn District of the County of Wigtown.

Taylor, W. K., L.R.C.S., L.A.H.(Irel.), Medical Officer for the Milton Abbot District by the Tavistock (Devon) Board of Guardians.

Vacancies.

Down District Lunatic Asylum.—Junior Assistant Medical Officer, not exceeding 32 years of age and doubly qualified. Salary £100, with furnished apartments, board, washing, and attendance. (See Advt.)

Great Northern Central Hospital, Holloway.—Pathologist and Curator of the Museum. Salary 50 guineas per annum. Copies of rules and further particulars may be obtained of L. H. Glenton-Kerr, Secretary.

Jenner Institute of Preventive Medicine.—Assistant Bacteriologist for the Serum Department, Aldenham, Herts. Salary £300 per annum, with furnished rooms. Applications to the Secretary, Jenner Institute, Chelsea Gardens.

Lancaster County Lunatic Asylum.—Assistant Medical Officer. Age not to exceed 30 years. Salary £150 per annum with board, &c. Applications to the Medical Superintendent, Lancaster.

London County Asylum, Horton, near Epsom, Surrey. Junior Assistant Medical Officer. Salary £150 per annum, with board, apartments, and washing. Candidates must be under 30 years of age. Forms of application of R. W. Partridge, Clerk to the Asylums Committee, 6, Waterloo Place, London (see advt.).

Manchester Hospital for Consumption.—Resident Medical Officer for the In-patient Department. Salary £109 per annum, with board, apartments, and washing. Applications to C. W. Hunt, Secretary.

New Ross Union.—Medical Officer. Salary £150 per annum, together with usual Vaccination Fees. The gentleman elected will also act as Medical Officer of Health at a salary of £15 per annum. Applications to P. A. Pope, Clerk of Union. (See Advt.)

St. Mary's Hospital Medical School, Paddington, W.—Demonstrator of Anatomy. Salary £70 per annum. Particulars may be obtained on application to Dr. H. A. Caley, Dean.

Births.

Caldecott.—On Oct. 4th, the wife of Charles Caldecott, M.B., B.S.Lond., M.R.C.S., Medical Superintendent of the Earlswood Asylum, Redhill, of a son.

Collins.—On Oct. 1st, at Ulverston, Lancashire, the wife of Arthur Ward Collins, M.B., D.P.H., of a son.

Fegan.—On Oct. 2nd, at Parkside, Werwyn, Herts., the wife of J. H. C. Fegan, M.R.C.S.Eng., L.R.C.P.Lond., of twin daughters.

Sherren.—On Oct. 1st, at 40, Devonshire Street, Portland Place, London, W., the wife of James Sherren, F.R.C.S.Eng., of a son.

Marriages.

Banting—Villiers-Tuthill.—On Oct. 1st, at St. Paul's Church, Bedford Cecil Banting, M.D., B.S.Lond., F.R.C.S., youngest son of the late William Banting, of St. James's Street, Pall Mall, London, to Ellinor Florence, third daughter of the late Egerton Villiers-Tuthill, of Ballina Srona, co. Limerick.

Bevan—Webb. On Sept. 30th, at St. Mary's Church, Shapwick, Somerest, David John, younger son of the late T. K. Bevan, M.D., of Rickinghall, Suffolk, to Ethel Mille, fifth daughter of the late Henry Wood, Worcester.

Cheatle—Jopp.—On Oct. 2nd, at the Savoy Chapel, London, George Lenthal Cheatle, C.B., F.R.C.S., to Clare Denman, daughter of Colonel Keith Jopp, R.E.

Matthews—Johnston.—On Sept. 30th, at St. Mark's Church, Surbiton, Ernest A. C. Matthews, M.A., M.B., M.C.Cantab., Lieutenant I.M.S., to Anna Stewart, only daughter of Robert Johnston, Esq., of Hillside, Surbiton.

Sanguinetti—Cash.—On Oct 4th, at St. Matthew's Church, Bayswater, Harold Herbert Sanguinetti, M.A., M.B., B.Ch.Oxon., of Minehead, Somerset, to Alice Marian Cash, late of Hove, Sussex.

Sumpter—Muspratt. On Oct. 1st, at All Saints' Church, Upper Sheringham, Eustace Wyatt Sumpter, M.B., B.S., third son of Walter Sumpter, M.D., Cley, Norfolk, to Edith Muspratt Muspratt, third daughter of the late Frederick Muspratt, Esq., J.P., formerly of Liverpool.

Townsend—Woodhams.—On Oct 1st, at St. Marylebone Parish Church, London, Arthur Allen Deykin Townsend, M.B., Ch.B., of Barnwood House, Gloucester, to Julia Florence, widow of Sidney Woodhams, M.R.C.S., L.R.C.P., of Gravesend, and youngest daughter of the late George Edward Sharland, of Gravesend.

Deaths.

Bird.—On Oct. 4th, at his residence, Bute House, Hammersmith, William Bird, F.R.C.S.Ed., M.R.C.S.Eng. (retired).

Forsythe.—On Sept. 30th, at Hazeldene, New Barnet, Anderson Forsythe, B.A., M.D., aged 58.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, OCTOBER 15, 1902. No. 16.

Original Communications.

THE NEW RELIGIO MEDICI. (a)

By SIR FREDERICK TREVES, BART., K.C.V.O., F.R.C.S.,

Serjeant Surgeon to H.M. the King; Consulting Surgeon and Emeritus Professor of Surgery, London Hospital.

SIR FREDERICK TREVES, who was most heartily received, said:—It is right that I should offer to those gentlemen who have just received the prizes the very hearty congratulations of the large audience before whom they have been distributed, and I should like to add to these congratulations my own. I think they are all very much to be congratulated, to this extent, that they have embraced the profession of medicine. Because at no time in the history of the healing art has the profession of medicine ever occupied so excellent a position as it does at this moment. At no period in the history of science has there been a more dramatic interest in its work. There is a certain amount of romance attaching to the merchant adventurers of old, who sailed from Liverpool on all sorts of curious quests, but the romance of that is nothing compared to the romantic voyages of discovery upon which bacteriologists and others concerned in the science of medicine are at this particular moment engaged. And for young men to whom adventure and discovery and the work of the pioneer appeal there can be no business more absorbing than that of the scientific business of medicine. I must be allowed to add, also, that I think those who are becoming members of this medical faculty may be congratulated upon their place of study. Of course, a certain amount of interest, reputation, and picturesqueness belongs to the old seats of learning, but I think the reputation is largely in the past and the beauty and picturesqueness largely those of repose. Here is a teaching body, energetic to a degree almost beyond belief, advancing every branch of science with the most determined and extraordinary vigour, living in every single fibre of their being, and impressing upon every person who steps within that college the impression that he is among a number of men who are absolute pioneers in the particular branch of science in which they are concerned. For a young man to find himself in the midst of an enthusiastic band of this character, such as is found in Liverpool, is, I must confess, an enormous advantage, and certainly a subject for congratulation. As another matter of congratulation I must also say this. Of course, we owe a great deal to our environment, and there is something very stimulating in the atmosphere of Lancashire, although I do not mean necessarily the atmosphere of this individual day. Those who take a map of England, and set to work to read the earnest history of England during the Victorian era, will find that a very large part of that history, and some of the most acute and interesting phases of it, will centre in the county of Lancashire. There is no concealing the fact of the immense vigour with which the history of that county is associated and that permeates all parts of it. And if you like for a moment to compare a man's future to a battle, in the terms of the battle of life, I can only say, from some experience of battles, that few men, if any, did better in the war in South Africa than the men who came from Lancashire. Of all the vivid recollections that I shall carry to my grave, one of the most vivid is the recollection of the splendid way in which, at the battle of Spion Kop, at which I happened to be present, the Lancashire Fusiliers and the York and Lancaster Regiment conducted themselves. That is the spirit which pervades the whole county, and belongs to the traditions and history of this county, and I think a man starting a profession starts it well when he starts it with the grand records and memories behind him which must always cluster around the county of Lancashire. On these occasions it is the custom to give an address, and I have ventured to choose as my subject to-day what I may term the modern "Religio Medici." Some 260 years ago an English physician published to the world a profession of his faith. The physician was Sir Thomas Browne, and the book which embodied his confession was "Religio Medici." The writer was a man of unusual culture, whose learning had been acquired at Oxford, Montpellier, Padua, and Leyden. It is memorable that this famous book was produced at the very commencement of the writer's career, and it may be well for those who are just now entering upon the profession of medicine to consider what is now, at the dawn of the twentieth century, the faith of the physician. There is much in the "Religio Medici" which is personal to the man who wrote it, there is a little which would be unacceptable to the modern physician; but there remains a not inconsiderable part which rests upon unchangeable foundations, and which is beyond criticism. The elements of that creed would appear to concern themselves with two great issues, with the general attitude of the medical man towards disease, and with his particular attitude towards the sick whom he will profess to treat. In the days of Sir Thomas Browne a conception of disease was current which still influences the minds of many, although that conception should have vanished with the advance of scientific knowledge. The old idea of disease was that it was a malignant entity, a something vaguely individualised as evil in origin, evil in intent, and evil in effect. It was the roaring lion going about seeking whom he may devour. The conception went further, and made of disease a Prince of Darkness vindictively hostile, and potent only for ill. His minions fell upon the land like a hideous blight, and covered a smiling country with the shadow of death. Primitive people regarded disease as the work of a malignant spirit who entered into a man, and who was to be propitiated by gifts and flattery on the one hand, or driven out by the beating of tom-toms, or by strident incantations on the other. To the author of "Religio Medici" disease was still the outcome of an influence which was outside the body and quite distinct from it. There was nothing natural in any of its processes, and nothing beneficent in any of its manifestations. It followed from this that every symptom of disease was of necessity regarded as wholly noxious, and as needing to be stamped out with unconsidered violence. If the patient vomited, the vomiting must be stopped; if he coughed, the cough must cease; if he failed to take food, he must be made to eat. Not for a moment could it be considered that there was any benevolent purpose in these phenomena.

(a) An Address delivered at the Opening of University College, Liverpool, on Friday, October 10th, 1902.

The physician of the present day cannot include this conception among the articles of his faith. In the new "Religio Medici" this matter of belief must follow some such lines as these:—The human body is highly organised, is frail, is finite, and is, of necessity, prone to decay and dissolution. It grows, its reaches its maximum power, it declines, and its capacities fail. In the progressive enfeeblement, and in the slow elimination of the evidences of life which attend old age there is nothing preternatural, and nothing which can be considered to be due to other than the simplest natural influences. The inherent decay of the human body renders it liable to accident, and there is no reason why it alone—of all other organic structures—should be exempt from injury. The body also—like other living fabrics—is prone to be infested by parasites, and upon the action of these parasites very many maladies depend. Not only is there nothing preternatural in disease, but it is the outcome of natural processes, and, more than that, there is evidence to show that many of its manifestations and of its methods are marked by a purpose, and that that purpose is beneficent. The time has come when it would rather appear that many of the so-called symptoms of disease are expressions of a natural effort towards cure, that they are not only not malign in their intent, but they have for their end the ridding of the body of the very troubles which they are supposed to represent. There was a time when the manifestations or symptoms of tuberculosis were regarded as products of a malicious evil which had no purpose beyond that of doing harm. Modern pathology, however, teaches that the so-called symptoms of tuberculosis are the expressions of a beneficent process which has for its end the cure and not the destruction of the patient. The body is invaded by a parasite called the tuberculous bacillus. Such invasion may be regarded as accidental. No symptoms and no discomfort indicate the act of infection. The phenomena which follow, and which are styled the "symptoms" of the disease, are no other than attempts on the part of the body to drive out the invader and restore the individual to health. Changes take place in the invaded part—let us say the lung—which are wholly beneficent and which have for their purpose the elimination of the parasite. Upon the efficiency of the inflammation induced in the tissues the life of the patient depends. Inflammation is, under all conditions, a benevolent process, the purpose of which is cure. Portions of the invaded lung may be destroyed and infected, and damaged tissue expelled; or the inflammatory process may effect the inclusion and safe isolation of the invading host. If the name "disease" has to be employed in the old sense, then it should be limited to the act of invasion, and "disease" in this particular instance has no symptoms. As another example may be cited the case of a man who accidentally wounds his finger. But for inflammation and suppuration every neglected septic prick would be fatal. The ancient surgeon who endeavoured to exorcise inflammation as if it were the vilest of evil spirits was directing his wrath against the most benevolent of angels who was ever entertained unawares.

This matter may be followed out a little more in detail in connection with the symptoms of the disease familiar by the uncouth name of appendicitis. In this malady a trouble occurs in the appendix. The wall of the little tube becomes perforated, and an acrid poison finds its way into the sensitive cavity of the abdomen. This, at least, is the essential calamity in many instances. The perforation is sudden, is accidental, and may be preceded by no warning sign of any kind. Here again the disease proper may be without a single symptom. The manifestations which follow the perforation are termed the symptoms of peritonitis. They are distressing and urgent, but they are all benevolent in intent, and are the outcome of Nature's vigorous effort to minimise the calamity and save the patient's life. The intense pain and collapse impose upon the victim absolute rest, and, more than that, enforce rest in the most advantageous posture, that, namely, of recumbency. He is rendered helpless at a moment when any movement may be attended by disaster. The sickness and the utter nausea which attends it secure some emptying of the alimentary canal, and forbid the introduction of any fresh material into an intestine which is best placed for recovery when it is least occupied. The skin of the abdomen becomes acutely sensitive, and so protects the damaged parts from disturbance and pressure, and this most necessary end is further secured by another symptom—the remarkable rigidity of the abdominal wall. Even should the affected area be accidentally pressed upon the firmly contracted muscles which cover it will shield it like a protecting cuirass. Thus is brought about that state of absolute rest which is essential as the very first step towards the repair of the injury. At the same time the condition of the circulation is so modified as to render absorption of septic matter from the affected district as little ready as possible. Within the abdomen the manifestations of peritonitis are appearing. Peritonitis has commonly been spoken of as one of the most deadly and most malignant of calamities. Never was a condition more unjustly abused. The phenomena of peritonitis should be hailed with thankfulness. Peritonitis is concerned only in effecting good. It is in every instance a beneficent process. It is Nature's method of bringing about a cure, and is successful in millions of instances. But for peritonitis every intra-abdominal wound and a multitude of intra-abdominal lesions would be inevitably fatal. So far as the abdomen is concerned peritonitis is the great life-saving process, and should its possibility be denied to mankind, the human race would be threatened with extinction. There is, indeed, no terror in peritonitis, although a world of alarm may well attend the calamity that calls it forth. Its mode of action is admirable in its simplicity. It induces an immediate paralysis of the ever-moving intestine. With the cessation of these now most dangerous movements the essential state of rest is secured. More than that, it pours out a plastic lymph which glues adjacent coils of bowel together, and in an incredibly short time isolates and encloses the damaged area. It forms a barrier around the seat of the mischief, and upon that barrier the life of the patient depends. An abscess forms, but, thanks to an active peritonitis, the matter contained therein is shut off, is rendered for the time innocuous, and is placed in a favourable condition to be discharged from the body. In actual truth, peritonitis is the operating surgeon's best friend. He who condemns it is like the man whose house is in flames, and who execrates the torrent of water which is poured upon the burning fabric. It would appear, therefore, that the creed of the physician should render his attitude towards disease the opposite to that which was current when Sir Thomas Browne wrote his thesis.

Many of the symptoms of disease, instead of being pounded out of the body by violence, as wholly pernicious, should rather be regarded as means for guiding the physician in the treatment he should adopt. Treatment has to be for the most part imitative of natural processes, and the imitation is founded upon the much-abused symptoms of the malady concerned. The man who swallows a poison is sick, and the treatment which best suffices in such a case is the fullest development of that symptom, namely, the washing out of the stomach. The abscess tries to find a way of escape, and the surgeon's knife but carries out the suggestion forced upon him by the evident intention of the pus. The cough which is so marked a feature in bronchitis tends to rid the bronchi of material which must needs be got rid of, and the physician, acting upon the hint, promotes such elimination. The difference between the old creed and the new in this particular of treatment is well illustrated by the treatment of aneurysm. As soon as an aneurysm has reached certain proportions a clot is found to be forming in it layer by layer. The surgeon who first approached the operative treatment of this condition advised the cutting out of the clot. He regarded the clot as a malignant product because he considered all the phenomena of disease to be malign. Indeed, he went so far as to consider the laminated clot to be the cause of the whole trouble, and therefore he advised that it should be excised at all costs. A later pathology thought that the clot formation represented Nature's method of cure, and that in it lay the saving of the patient's life. The modern surgeon, therefore, not only does not disturb this product but he adopts every measure to ensure its formation. The most successful treatment of aneurysm, indeed, professes nothing more than an encouragement of a natural process, and is based upon the imitation of a prominent symptom of disease. In peritonitis, as has already been pointed out, the pain and tenderness suggest the treatment by absolute rest, the vomiting the treatment by starvation. In ulceration of the cornea the eye closes and a discharge of tears flow over the globe. The treatment imitates this in so far that the eye is kept at rest, light is excluded, and the part is washed by a warm sterile solution.

The second great element in the Religio Medici concerns the relation of the physician to his patient, and here there is probably but little divergence between the old faith and the new. Those principles which should guide a medical man in his conduct towards his patients are few and simple, and the most conspicuous of them would appear to range themselves under three heads.

In the first place, he who adopts the profession of medicine should be strong. His strength must depend upon the fulness of his knowledge of his adversary and of the tactics his opponent may employ. It is not the strength of crude force, but it is that excellent power which depends upon a fine and cultivated sense, a quick perception, a ready judgment, and a delicate susceptibility. It is not the strength needed by the man who wields a bludgeon, but rather that which guides the deft hand of the fencer. It must not be assumed that the education of the physician can be founded exclusively upon text-books and treatises, even when it is supported by work in the laboratory and at the bedside. In the accomplishment of the most learned physicians there may be one thing lacking, the need of which may stand between him and the fullest equipment for success, and that one thing is a tactful and sympathetic knowledge of his fellow man. Indeed, it is not too much to say that the highest qualifications of the practitioner of medicine are not to be represented by any university degree nor discovered by any system of inquisition.

In the treatment of the sick a certain profession of dogmatism is essential. The sick man will allow of no hesitancy in the recognition of his disease. He blindly demands that the appearance of knowledge shall be absolute, however shadowy and unsubstantial may be the bases of it. Moreover, the sick man in his weakness looks to his doctor for the supporting hand and the strong arm; he is moving in the dark and he needs to be led; he is haunted by apprehension and his fears must be allayed. It is this succouring of the weak, this guiding of the feeble, which represents that which is most noble in the profession of medicine. This great privilege, this kindly power, is the heritage of all who embrace the healing art, and it is the possession, of all others, upon which the influence of the physician is based. The second need in the equipment of the medical man is absolute fidelity. All those who profess to attend upon the sick undertake a solemn trust which needs to be observed with punctilious care. The sick man must place implicit faith in his doctor or no faith at all. The fulness and simplicity of this confidence are the measure of the scrupulous honesty with which it must be received. In accepting the trust every physician takes upon himself a grave responsibility, and he who is the most exact in the right observance of this confidence has the greatest claim to be worthy of his calling. The burden of such a trust is little appreciated beyond the confines of the medical profession, and every physician of any experience has had to learn with some bitterness how much self-denial and self-effacement this trust implies, how little the responsibility of it is appreciated, and how much injustice to the doctor its honest acceptance may involve. The public are apt to talk glibly of "medical etiquette," and to assume that it is founded upon some special code of ethics, and based upon a system of morals especially constructed for the advantage of the medical profession. Such criticism is unjust, as criticism usually is which is based upon imperfect knowledge. It is needless to say that there is no precept in "medical etiquette" which is other than the outcome of the simplest justice, the simplest right doing, and above all the truest care for the interests of the patient.

The third article in such part of the "Religio Medici" as bears upon the qualifications of the physician is this—he must be kind. He must needs be a man of wide sympathies, and possessed of that rare qualification which enables him to put himself in the patient's place. There need be little art in this. Genuine sympathy cannot be assumed, or, if assumed, its artificiality is too apparent to deceive even a child. In the mere treatment of the sick a simple kindliness of heart is an essential factor, and it can never be replaced by any assumption of manner, however elaborate, or however precisely mimicked.

In conclusion, I would say that those who are about to enter upon the arduous career of medicine can keep no better motto before their eyes than this: *Fortiter, Fideliter, Feliciter.*

THE FIELD OF VIEW OF THE ANÆSTHETIST. (*a*)

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I propose to give some account of the field of view of the anæsthetist, and of the physiology of the systems which it involves, and in doing so give me leave to mention here and there points on account of their general interest, although they may at first sight appear irrelevant.

The respiration may be heard, the respiratory movements may be seen and felt. The force of the expired air may be felt too. The complexion is a guide as to the efficiency of respiration and the condition of the circulation, and in estimating the latter the pulse is useful, as well as being some guide to the depth of anæsthesia. The state of the pupil of the eye, the presence or absence of conjunctival and corneal reflexes, the condition of the muscular system as to its relaxation, and that of the skin in regard to its moisture, are useful in some circumstances, and when there is doubt may be assuring or otherwise.

A favourable result of a survey of the phenomena in this field will generally depend first upon a due performance of respiration which is liable to many kinds of interruption, and the anæsthetist has to steer clear of, remove or control, any untoward condition that may occur to the patient, *e.g.*, nervousness, resistance, holding the breath, crying, laughing, talking, shouting, accumulation of secretions or other matter or materia in the airway or its neighbourhood; respiratory obstruction such as may arise from falling back of the tongue, spasm of the glottis, or other muscles above it; resistance, struggling, general muscular spasm, coughing, vomiting, pallor, cyanosis, failure of respiration, which may be due either to respiratory or circulatory causes, and in this connection it is to be remembered that asphyxia may depend not only upon any of the numerous possible causes of the deprivation of oxygen or the excess of carbonic dioxide in the respiratory medium, but it may be induced by arresting the blood supply to the medulla oblongata, as shown by the Kussmaull-Tenner experiments, or by producing universal anæmia by large hæmorrhage.

The anæsthetist should see that the patient is kept sufficiently warm; that there is no constriction to interfere with respiration, and that no one engaged in the operation nor any bystander is leaning upon the patient's chest. He should be practically familiar with methods of artificial respiration and other procedures for resuscitation in the event of failure of the patient.

(*a*) Abstract of Presidential Address delivered at the West London Medico-Chirurgical Society, on October 3rd, 1902.

The rhythmical functions of respiration and circulation, and all the principles involved, are controlled by the nervous system, which is dependent upon the effect of a due performance of the functions of respiration and circulation for its power of control.

Respiratory movements are entirely dependent upon the nervous system. They are presided over and controlled by the bilateral respiratory centre situated above the vaso-motor centre in the medulla oblongata, which is brought into relation with the muscles of respiration by efferent nerves, the most important of those concerned in ordinary breathing being the phrenic and intercostal nerves. The circular muscles of the bronchi and bronchial tubes are supplied by motor fibres running in the pneumogastric nerves. The tubes are narrowed by the artificial excitation of these nerves. The respiratory centre is also related by afferent nerves, the most important of which are the vagi, but almost any afferent nerve may powerfully affect the centre, and it is also influenced by fibres passing to it from the higher parts of the central nervous system. Of all the sensory nerves in the body the vagi are the only ones whose section produces a marked and permanent change in the respiratory rhythm. Rosenthal showed that section of both vagi made respiratory movements deeper and less frequent. The amount of air taken in during a given time being unaltered, as the alteration in depth and frequency frequently balance each other. Division of the vagi has been performed by every physiologist who has investigated the innervation of respiration, but with varying results. Rosenthal's is the typical effect. In many cases, however, the issue may be quite different.

Consideration of the processes associated with respiration throws much light upon the conditions arising during the inhalation of irritating and anæsthetic vapours, *e.g.*, ether, chloroform, &c., which excite interruption or irregularity of breathing, swelling (it may be mentioned here, for instance, that excitation of the lingual and glosso-pharyngeal nerves dilate the vessels of the tongue while stimulation of the hypoglossal nerve causes them to contract), and spasms of muscles about the air passages, excessive secretion of mucus, saliva, &c., the entry of contents from the stomach into the airway; the altered condition of the blood arises partly from interference with respiration, which is influenced by causes that may be either voluntary, the result of irritation of the air passages by the anæsthetic, or the result of the entry of the anæsthetic into the blood and its effects upon the nerve centres and upon the heart and vessels, or a combination of all of these. More will be said of this later, after considering the circulatory organs, &c., and when enumerating the conclusions of certain experiments.

The irritability of the respiratory passages varies in different individuals and at different times. It is generally increased under emotional circumstances, as when commencing to inhale an anæsthetic, but the amount of cough will depend greatly upon the anæsthetic chosen, in the different circumstances and the manner in which it is introduced. Suddenly inhaling a strong vapour of ether or chloroform is likely to excite cough, and may be a sensation of choking or suffocation. The inhalation of these vapours excites in different patients a variable and sometimes large quantity of saliva and mucus, a viscid mixture, which becomes frothy through being beaten up, as it were, with the respired air, and ultimately adheres about the airway, causing irritation and more or less obstruction of it, giving rise to cough, cyanosis, asphyxial conditions and their depressing consequences, associated often with profuse sweating. Ether is more prone to give rise to those symptoms than chloroform; not infrequently there is little trouble in continuing ether after the first accumulation has been got rid of by removal or swallowing. Keeping the head on one side will often allow the secretion to get into a position where it may cause less and inappreciable irritation or escape. This viscid mucus is often swallowed in considerable quantity, and frequently gives rise to post-anæsthetic sickness.

When cough arises during the early stages of anæsthesia, whether due to irritation or secretion, or both, it is advisable to manœuvre for a deeper anæsthesia which will overcome the coughing. In the later stages of anæsthesia, and when the operation may have been some time in progress, there may be a very excessive amount of secretion preventing efficient respiration, and in that case the secretion may be sufficiently removed with a swab, on a holder or on the tongue forceps, or it may be more advantageous, if there is no reason to the contrary, to allow the patient to come round to some extent temporarily, when he will cough and get rid of the secretion. It may be advisable if ether is being used, in extremely troublesome cases of this kind, to change the administration of ether to that of chloroform, after first clearing away secretion.

In asphyxia, when the vaso-motor centres are directly stimulated by the venous blood the antagonism is still better marked; the cutaneous vessels are widely dilated and engorged, the face is livid, but the abdominal organs are pale and bloodless (Heidenham). The blood pressure rises rapidly, reaches a maximum, and then gradually falls as the vaso-motor centre becomes paralysed. Two factors may be distinguished in the blood pressure—the hydrostatic, due to the weight of the column of blood acting on the vessel, and the hydrodynamic, which is due to the work of the heart. And the influence of change of posture on the circulation is almost completely compensated by the control exercised by the vaso-motor system. In paralysis of the vaso-motor centre by $CH\,Cl_3$ the compensation is destroyed and the circulation may be profoundly influenced by position; elevation of the head may lead to cerebral anæmia, syncope, and even death; elevation of the legs, and particularly the abdomen, may restore the sinking pulse by filling the heart and vessels of the brain.

Owing to these influences it is not until a quarter of the blood has been withdrawn that there is any notable effect upon the pressure, for the loss is quickly compensated for by an increase in the activity of the heart and a constriction of the small arteries. The proportion of blood to body weight in an infant is 1-19, in an adult 1-13. An animal may recover after losing considerably more than half its blood. It is not usually possible to bleed a dog from its carotid of more than three-fourths of its blood. In introducing blood or saline solution into the circulation these compensatory influences are reversely at work, and an addition of 50 per cent. may not cause any marked increase of pressure, and the circulating fluid of an animal may be almost doubled without causing death.

During an operation the quantity of blood in the patient varies for practical purposes, not only by reason of the hæmorrhage that takes place, but also with the situation of the remaining blood and consequent supply to vital organs. The quality of the blood is of much importance, and this as well as the quantity possessed by persons about to undergo an operation varies, and is often below the standard of health.

Vomiting may occur before, or during the administration of an anæsthetic, from various causes, including emotional ones, or be excited by the sense of smell, or taste, or it may depend upon direct irritation of the respiratory or alimentary passages, by the anæsthetic vapour, or be set up by irritation due to excessive secretion, or be the result of the effect of the anæsthetic upon the nervous and circulatory symptoms. It frequently occurs if the depth of anæsthesia is allowed to lessen before the patient has arrived at the depth of surgical anæsthesia, or when the anæsthesia is passing off during or after an operation—in other words, when the patient is "coming round." It is more frequently associated with some operations than others, depends largely upon individuality, and may in many cases be avoided by thorough preparation of the patient by diet, rest, and aperients. It is generally associated with some faintness, may be excited by movement or change of position, and probably never occurs during deep anæsthesia.

The conditions which influence the size of the pupil will account for its behaviour during the administration of anæsthetics, not being constant or uniform. A contracted, a medium, or a mobile state of the pupil is satisfactory. In the early stage of chloroformisation the pupil should be contracted, but a dilated pupil may be observed sometimes in the early stages of general anæsthesia, although it is commoner in the later stages and, I believe, constant in the dangerous conditions in which death is impending, unless influenced by drugs, *e.g.*, opium, or pathological conditions such as adhesions, or disease of the nervous system. A dilated pupil is a signal (not necessarily of danger) to the anæsthetist to make doubly sure of the exact condition of the patient. While respiration and circulation are effectually proceeding, a widely dilated pupil soon contracts on temporarily discontinuing the anæsthetic. Besides the conditions referred to it may be evidence of excess of anæsthesia or exhaustion from shock or hæmorrhage, and is frequently observed as a precursor of vomiting. A contracted pupil is always reassuring unless produced by drugs, *e.g.*, opium or morphia, or by disease. While administering an anæsthetic, I have occasionally observed the pupil of a patient undergo some contraction and a corresponding amount of dilatation synchronously with respiratory movements.

Dilatation of the pupil while administering chloroform may arise from various causes, but when it is due to too high a percentage of chloroform in the system it is perilous to ignore it. Suppose a patient to be breathing very shallowly or to stop breathing, conditions which may occur early in an administration or temporarily under some circumstances from what has been said, when there may be no danger. But if also the pupil be dilated and there be a livid pallor of complexion, you are face to face with a fatality unless the condition is recognised and corrected. It is a moment when the living aspect of the patient may be changing to one of death, when the vital functions are arrested or nearly so, and one which severely tries the judgment, nerve, and resource of the anæsthetist.

The corneal reflex is more sensitive than the conjunctival, and during the administration of an anæsthetic the former may be present while the latter is absent. Both are absent when surgical anæsthesia is complete, and I have exceptionally known them to be absent in quite the early stages of anæsthesia, and before anæsthesia is complete, so that their absence is not an infallible guide to the anæsthetist in this respect.

[Mr. Lloyd here introduced the conclusions of Dr. Embley and Prof. C. J. Martin, of Melbourne, drawn from a long series of experiments on animals, and published in the *British Medical Journal* April 19, 1902, and of which most are hereunder reproduced.]

“Summary of Conclusions of Dr. Embley's Experiments. (*a*)

“1. Heart muscle is very sensitive to the poisonous effects of chloroform.

“2. Chloroform raises the excitability of the vagus mechanism, particularly in the early part of the administration. The increased excitability of the vagus mechanism is due to the action of chloroform on the centres. The inhibitory action of the vagus is more intense and fatal in its effects, from being exercised upon a heart whose spontaneous excitability is diminished by the action of chloroform upon it. Chloroform vapour, not stronger than 1·5 per cent., in the air administered to morphinised dogs, after a period of mild excitation, slowly depress vagus excitability. Above 2 per cent in the air inhaled may occasion dangerous or persistent inhibitions in dogs.

“The failure of many experimenters to recognise the importance of vagus inhibition of the heart, appears to depend upon the fact that the inhibitory mechanism was paralysed or exhausted by the previous induction of chloroform anæsthesia before the records of the experiments were commenced. This especially applies to the Hyderabad Commission and Richet. A dog becomes, in fact, quite another animal after the induction of chloroform anæsthesia without morphine: from being an animal with a very sensitive vagus control of the heart, he becomes one almost wholly devoid of this function, that is, if he lives through the induction. Consequently vagus inhibition from chloroform alone, or from chloroform and asphyxia combined, or from reflexes arising from surgical procedures, are difficult to demonstrate in dogs so prepared.

“Similarly the inferences of the Hyderabad Commission, with respect to the time relations of cardiac and respiratory failure, although true for their experiments, do not necessarily apply for animals in which the vagus mechanism, the cause of sudden circulatory failure, is not exhausted. They did not take any records of the induction period of chloroform anæsthesia, the period in which the vagi are active.

“The fall of blood pressure has been shown to be largely due to the direct effect of chloroform upon the heart. Heart failure begins with the fall of blood pressure All blood-pressure tracings, those of the Hyderabad Commission as well, show that this precedes failure of respiration.

“Richet, on the other hand, and curiously enough from results obtained from experiments performed upon animals with similarly exhausted vagi, concluded that clinical deaths never result from failure of respiration. The recovery of vagus function after the depression resulting from the induction of chloroform anæsthesia is slow, and I wish to emphasise the fact that transient recovery, followed by reinduction, does not represent the conditions of a primary induction.

“Section of the vagi or atropinisation of dogs, absolutely abolishes sudden heart arrest from chloroform. The heart under such conditions fails slowly with rapid pulse, slowing as the blood pressure approaches zero. Under these conditions the respiration fails when the blood pressure falls sufficiently, and invariably long before the heart stops. The vagi of dogs vary considerably in their relative excitability and endurance. This constitutes the important personal factor in dogs. Vagus inhibition is, in dogs, the great factor in the causation of sudden death under chloroform.

“3. The central medullary vaso-motor system is stimulated, at any rate for a time, by chloroform. Oncometer experiments show that the net result of chloroform on the vessels of the spleen, bowel and kidney shortly after the commencement of inhalation is dilatation. The effects of chloroform on the peripheral mechanism is paralytic, and on the central vaso-motor system is stimulative, so that the effect on the intact animal is some algebraic sum of the increased stimulus reaching the muscle cells, and of their diminished power to respond. At the very beginning of inhalation the second factor may predominate.

“Gaskell and Shore found that when chloroform was delivered to the brain alone, vascular constriction ensued, and they concluded that chloroform did not paralyse the vaso-motor centres. Hill, on the other hand, found that when chloroform was delivered to the intact animal vascular relaxation ensued, and inferred that vaso-motor paralysis occasioned it. My experiments demonstrate that the results of both of these investigations are correct. They further show that Hill's results were from peripheral and not central paralysis, and that the amount of vascular relaxation that Hill demonstrated was the resultant of these two opposing factors. There appears nothing to justify the assumption of Dastre that vascular constriction is a result of the administration of chloroform.

“The cause of the fall of blood pressure from the administration of chloroform is paralysis of the muscle cells of the heart and of the arterioles, the fall may be further augmented by slowing of the heart's rate.

“4. Failure of respiration in inhalation experiments is mainly due to fall in blood pressure. With a good blood pressure, failure of respiration by inhalation of chloroform is practically impossible. Restoration of respiration is dependent upon restoration of blood pressure. Failure of respiration occurring in the induction or early period of anæsthesia happens as frequently after as it does before the heart stops.

“I have emphasised the fact that the chances of dangerous vagus inhibition in chloroform administration are greatly increased by imperfect respiration; (2)

(*a*) This summary of conclusions is part of the papers that appeared in the *British Medical Journal* this year (April 19) by Dr. Embley, Hon. Anæsthetist to the Melbourne Hospital.

that respiration fails when the blood pressure falls greatly from cardiac inhibition or other causes.

"In these two series of phenomena we have material for the formation of a vicious circle; for example, supposing (as happens in some cases) that from the inhalation of too strong vapour of chloroform cardiac inhibition occurs, this occasions (1) dangerous fall of blood pressure; (2) cessation of respiration, and the asphyxia consequent thereupon itself increases the inhibition. Or supposing (as happened in some other cases) the administration of too strong vapour occasions by its direct action upon cardiac muscle a rapid fall of blood pressure. This is followed by cessation of respiration, and the ensuing asphyxia is very liable to produce sudden and often fatal inhibition of the heart, which, of course, still further depresses the blood pressure.

"I do not wish to discuss the practical application of these results at present, but one obvious moral is, use only weak vapour of chloroform (less than 1 per cent.) in the early stages, until the initial increased excitability of the vagus mechanism has given place to diminished excitability; in other words, take time in "putting the patient under."

Mr. Lloyd continues:

The consideration of the amount of anæsthetic absorbed and its effects are all-important to this subject. By way of illustration the degrees of anæsthesia and calculations of Dr. John Snow, the author of the first classical work upon the subject, entitled "On Chloroform and other Anæsthetics," published in 1858, are interesting. I will briefly place them side by side:—

Degrees of Anæsthesia.

1st degree. — Consciousness not abolished, disturbances of special senses and sensibility.	Snow calculated that it was necessary that the blood of an average adult patient should contain twelve minims of chloroform to produce his 2nd degree of narcotism.
2nd degree. — Mental functions impaired, not suspended.	
3rd degree.—Voluntary movement suspended, involuntary movement continuing.	Eighteen minims of chloroform for the 3rd degree.
4th degree.— Breathing stertorous, pupils dilated, muscular system relaxed.	Twenty-four minims of chloroform for the 4th degree.
5th degree.—Respiration failing profoundly, sometimes only diaphragmatic, then ceasing, and soon the heart also, as in death from asphyxia.	Thirty-six minims of chloroform in the blood for the arrest of respiration.

The Committee appointed in 1864 by the Royal Medical and Chirurgical Society found that atmospheres containing from 2 per cent. to 4 per cent. of chloroform vapour were attended with little or no risk to life, that 5 per cent. were sometimes necessary, and that stronger atmospheres induced alarming symptoms.

The following table of 839,245 chloroform and ether administrations, collected by Dr. Julliard, of Geneva, shows their relative frequency of administration and death-rate:—

Anæsthetic.	Total Number of Administrations.	Total Number of Deaths.	Death-rate.
Chloroform ...	524,507	161	1 in 3,258
Ether	314,738	21	1 in 14,287

Statistics prepared by different observers vary, and although it is proverbially said that statistics may be made to prove anything, still there is an overwhelming majority in favour of ether in all of them.

Dr. Embley's conclusions are such important results of very much work, and his references are so comprehensive, that I did not hesitate to quote them word for word.

Admitting his statement that "section of the vagi or atropinisation of dogs absolutely abolishes sudden heart arrest from chloroform." The former is not applicable as a preliminary to human surgery. Under the influence of atropine, which is itself a poison acting in varying degrees upon different individuals, chloroform is not wholly robbed of its lethal properties by the action of the atropine, and the question arises whether, during the administration of chloroform in practice, the chances of restoration would be increased if, through unforeseen circumstances, a condition arose calling for artificial respiration, &c., in an atropinised patient.

In experimental work chloroform appears to be the anæsthetic usually selected. Ether is generally more favoured than chloroform by those clinical anæsthetists who do not limit themselves to one anæsthetic. It is to be admitted that chloroform has the advantage of ether in some cases, *e.g.*, in administering ether to some patients it is impossible to obtain a deep enough anæsthesia to cause muscular relaxation without danger, which is shown by laboured and embarrassed respiration and increasing and extreme cyanosis while the administration of ether is continued.

It is a fact, too, that the administration of a little chloroform to a patient who is recovering from that cyanotic condition that has been brought about by ether, causes the patient to rapidly pass into a state of muscular relaxation and surgical anæsthesia without undue cyanosis, and giving little or no anxiety. It is not always possible to recognise with certainty the patient that will present those symptoms, but when they occur under ether they soon pass away on discontinuing that anæsthetic, and then a very little chloroform is sufficient to establish surgical anæsthesia, and it is remarkable how well chloroform suits patients with whom ether disagrees in that way.

Some complicating symptoms arise oftener while administering one anæsthetic than another. Some of those symptoms are attended with more danger than others, and similar symptoms arising in association with one anæsthetic are less dangerous than when arising with another. For instance, any untoward symptom arising during the administration of chloroform is more dangerous than a similar symptom arising during the administration of ether. Not only that, but dangers from chloroform are more insidious than from ether, display themselves more suddenly, and produce a condition in which the vital functions are more profoundly in abeyance, and their restoration necessitates efforts more prolonged and more doubtful of success.

The consideration of normal physiology is essential in regarding the physiological effects of anæsthetics. Chloroform has been the subject of many inquiries conducted in laboratories by individuals, committees and commissions, resulting in views with some of which all investigators agree, while in others there is great diversity of opinion. These results, derived from experiments upon animals, valuable and important as they undoubtedly are, do not embrace all the clinical difficulties of the anæsthetist, whose human patients have higher sensibilities, and are generally anæsthetised without selection, or preliminary drugging or tracheotomy to obtain respiratory freedom. In the accounts of laboratory experiments there is generally no reference to the difficulties always met with, more or less, in anæsthetising man, namely, those referred to early in this paper, and which are sometimes embarrassing enough to restrain a timid, or to lead to failure or catastrophe in the hands of a rash, administrator. The important clinical factors, loss of blood and operative procedure, too, are generally omitted, or play no part in the experiments. Animals are sometimes unintentionally lost in experiments, *i.e.*, die by "misadventure," or "while under the influence of the anæsthetic," and if it were not that the experiments are often intended to terminate with the death of the animal, it is likely that the records of such accidental deaths would be larger.

I believe the safety of anæsthetics will be increased, that strenuous efforts to that end will be continued, and that it is impossible to absolutely eliminate all risk under all circumstances from such potent agents in human hands.

THE NICOTINE QUESTION IN SMOKING.

HABERMANN'S RECENT ANALYTICAL RESEARCHES AND EXPERIMENTS.

By Prof. STRANCH, M.D.,
of Vienna.

[*Specially Translated for* The Medical Press and Circular *by Dr. J. G. ad Goelz, Pontypridd.*]

Just as the deadly nightshade contains atropine, and the poppy morphine, so does the tobacco plant contain nicotine as an active poison; it is its specific poisoning substance, which it alone can prepare.

A yellowish fluid, easily volatile, of disagreeable taste, it itches on the tongue, excites to vomiting, and acts chemically as a strong alkali. It is volatile, hence it easily passes through the mucous membrane of the mouth, stomach, and intestines. Having arrived in the stomach it meets with cells of peculiar construction, with which it brings about chemical combinations, whereby it first excites these cells to increased activity, and then leaves them paralysed. These are the nerve-cells which build up the brain and spinal marrow. The consequences, which such a disturbance or destruction of the little wheels in the human organism is able to bring about, are termed symptoms of poisoning; in the worst cases it means death.

I may be allowed to mention a few of these symptoms. The heart is to the fullest extent adapted to all demands; when we run, perform gymnastics, or exercise ourselves in any way, the muscles of the body exert themselves most, and consequently must be provided with a more plentiful supply of nourishing blood. This is done forthwith by the heart: it beats quicker than before, and so performs increased work. If, on the other hand, we lie still in sleep, the need of blood for the organs is at a minimum; the heart then works slowly, much slower than during the daytime.

The order for increasing or decreasing the activity is transmitted by a special, automatic nerve channel—the *nervus vagus*. Now, this nerve is just one of the many vulnerable points liable to be attacked by nicotine. It becomes excited, sometimes even paralysed, but this only in cases of severe poisoning. The consequence is that the heart is no longer able to adapt itself to its functions, as the regulator of its activity has got out of order. This shows itself, accordingly, in a weakened or hurried pulse, with palpitation, difficulty in breathing, &c., as immediate consequences.

In the spinal marrow high up in proximity to the brain lie the cells which control the action of breathing. Should these become paralysed by the poison, breathing would cease at once, and that would mean death to the affected person through suffocation.

Formerly, when nicotine and the tobacco plant were still extensively used in the medical practice, such fatal cases may doubtless have happened owing to mistakes. Nowadays, however, cases of nicotine poisoning, as a consequence of excessive tobacco smoking or chewing, come rarely under medical treatment.

The question now arises, what part does nicotine play in our different modes of enjoying tobacco, more especially in the case of cigars, of which alone I shall treat in the remainder of this article.

First of all, let us trace the process of development of the cigar. A tobacco-leaf, plucked from the plant, and dried forthwith, looks like tobacco, but it is quite unsuitable to our taste, even the Havana variety. In order to make the leaves fit for smoking, they must undergo a process of fermentation. To this end they are piled up in the moist state in heaps of from one to five tons, and are then left to themselves for several weeks. In this way the bacteria, mould-fungi, &c., which are found plentifully on the leaves, are given the opportunity for an enormous increase.

The result is a partial destruction of the plant substance, and certain bodies appear as secondary products of the activity of these minute, but powerful and skilful chemists, which give to the prepared tobacco its peculiar flavour. Moreover, the entire heaps become considerably heated; a temperature of 60° C. even has been registered in the interior of such a heap—a sign of the violent energy developed during the fermenting process.

The entire circumstances are analogous to those which bring about the spontaneous combustion of hay, for in this case too, most probably, mould fungi are the primary cause of the evolution of heat.

The process of fermentation imparts, as observed, to the cigar manufactured in this way its flavour; and, indeed, a specific flavour, for a Mexican cigar tastes very differently from the Havana article. The speciality is to a great extent due to the properties of the fermenting organisms, and, considering the great variety of the bacteria flora, this is not to be wondered at. The fact itself is of great practical importance, for it points out a means of improving poor qualities of tobacco, viz., by "inoculating" them with germs from better kinds. Yet the fact remains unaltered, that the best cigars are obtained from the best classes of raw tobacco.

During fermentation the amount of nicotine is reduced by about one-half. Thus it appears very unlikely that we smoke tobacco for the sake of the nicotine. It would otherwise be acting very irrationally to lessen the amount of the desired substance by what is, after all, the secondary and unessential process of making it palatable. The supposition becomes still more improbable when we learn that the finest sorts of tobacco contain ·5 to 2 per cent. nicotine, while the inferior kinds have from 2 to 8 per cent. calculated upon the dry state. In addition, it should be mentioned that, in accordance with the analyses of tobacco-smoke (*i.e.*, inhaled smoke) treated in the following paragraphs, the amount of nicotine contained in the Austrian "Regie-cigar," of almost all kinds, whether mild or strong, was found to be about the same, independent of the proportion in the cigar.

In order to arrive at a conclusive decision physiological experiences should suffice. There are few poisons to which the system can accustom itself more quickly than nicotine. A rabbit that is to-day just able to survive the effects of a certain amount of the poison, will require, a few days later, a considerably larger quantity of the poison in order to produce symptoms of the same intensity. If the poisonings be only carried on often enough, this can easily be brought so far, that the rabbit can, without inconvenience, take an amount of nicotine that would kill directly a normal animal. Applied to the human constitution this means that the smoker, who at first gets sick after one cigar, will soon be able to smoke several with comfort.

As I have already said, there is no direct, and probably no indirect connection either, between the "strength" of a cigar and the amount of nicotine it contains. I take the following data from an experiment performed in this connection.

A Manilla cigar, marked as particularly strong, sold for 1½d., contained 1·192 per cent. nicotine; a mild "Importé," on the other hand, contained 2·241 per cent. It must therefore be considered as purely accidental if an Austrian, strong "Regie-Virginia," has also yielded 2·96 per cent. as its maximum percentage. The fact that a so-called "nicotine-free" cigar contained, none the less, 1·37 per cent., *i.e.*, more than the above-mentioned "Manilla," need not interfere with its harmlessness in other respects.

What really constitutes the strength of a cigar is so far, entirely unknown as a chemical factor, but will in all probability have to be looked for in the products that come into existence during the fermentation of the tobacco leaves, and which, as such, or in an altered form, mix during the combustion of the cigar with the inhaled air, producing in this way the effects of poisoning.

I may be allowed to add a few more words with regard to the changes the cigar undergoes while being smoked.

As the cigar smoulders away slowly, under a comparatively slight development of heat, no flame arising only the products of incomplete combustion appear, and among them, without doubt, are those unknown chemical bodies which impart the aroma to the smoke. Among the products of combustion accessible to chemical research, carbon dioxide and carbon monoxide, which latter is the cause of poisoning by charcoal fumes, take the first place in point of volume.

By means of an ingenious apparatus, which exactly copies the action of smoking, J. Habermann has recently succeeded in collecting and classifying the different gases in the smoke of Austrian Regie cigars.

The following data are taken from his interesting treatise. The experiments were so conducted that, by means of a pumping apparatus a measured quantity of air was sucked through the lighted cigar, and at such a rate that the cigar quietly burned to the end. The combustion of the cigar passed off therefore exactly as if a smoker had kept it alight in the usual way. If the pump worked too slowly the cigar went out. In this manner it was possible to fix, for each sort of cigar, the necessary amount of ventilation. Now the question arises, what becomes of the nicotine, of which the cigar contains a considerable quantity. Being a volatile fluid, it cannot exist in this state at a high temperature, but passes over into the gaseous form. It therefore evaporates in the glowing part of the cigar, and, as nicotine vapour, is carried off along with the inhaled air, to mix with the various gases of the tobacco-smoke.

Now during the analysis Habermann found again in the smoke one-sixth to two sixths of the quantity of nicotine the cigar had originally contained. This is, therefore, the quantity to which it is believed poisoning effects may be ascribed. If we translate these figures into practice, we arrive at the following calculations:—A cigar of the Porto Rico kind weighs about 4 gr. It contains ·05 gr. nicotine, of which at most one-third, say, ·02 gr. is absorbed by the smoker. But as the cigar end must be deducted from this, the quantity is reduced to ·015 gr. Of this quantity, 15 milligrams, not more than one milligram enters the system of the smoker, and that is practically nothing.

As I have above observed, only a small fraction of the nicotine passes off in the smoke, the remainder is accounted for in two ways A small portion cannot escape combustion, by which it is more or less altered, at all events it is changed into substances which are no longer nicotine. The other portion undergoes the following changes. The vaporised nicotine finds itself receding from the "glow-zone," the farther it gets the less are the conditions fulfilled which are requisite for its continued existence in the gaseous state; in other words, when the nicotine vapour reaches the cooler part of the cigar, it condenses again into a fluid, and remains thus dormant. The small portion of nicotine which escapes this repeated condensation, is the same portion, which later can be observed in the smoke.

The part where the vapours thus condense, namely the cigar end, is therefore considerably richer in nicotine than is warranted by the amount of unconsumed tobacco. In accordance with this Habermann found, during the analysis of the cigar end, that its contents of nicotine and nicotine-like substances, were from 20 to 100 per cent. more than could be expected from the contents of the whole cigar.

A considerable number of other fluid substances were also found in the cigar smoke, such as pyridine—the fluid by means of which methylated spirits are made unfit for drinking—sulphuretted hydrogen, and perhaps also some prussic acid.

If now, we ask again, on what does the strength of a cigar depend, the number of substances which have to be considered can be considerably lessened. Carbonic acid and nicotine, as well as the minute quantity of sulphuretted hydrogen, may be left out of consideration to start with. There remains the group of pyridine-like bodies; among which, of course, there may still occur some most violent poisons—prussic acid, for example, which, being an extremely active substance, is able to produce its symptoms of poisoning even when present in very small quantities; and finally there is the carbon monoxide.

Indeed, it is extremely improbable that any single substance is accountable for the strength of a cigar; most probably a great many contribute towards it whose respective quantities will vary in each cigar, depending however, on the form of the cigar, the amount of moisture, the rate of smoking, and many other factors. Owing to these considerations a clear decision of the question is very remote. For the present we must be satisfied with the knowledge that nicotine has not by far the dangerous signification which is commonly attributed to it.

Berlin Clinical Lectures.

THE
DIAGNOSIS AND TREATMENT OF GASTRIC ULCER.

By Dr. EWALD,
Of Berlin.

I shall confine myself to the study of gastric ulcer from the point of view of a diagnosis, leaving on one side the therapeutical aspect of the question. In the first place, I cannot agree with the opinion of M. W. van Ijzeren, who is inclined to think that the cause of ulcer of the stomach is due to spasm of the pylorus, an hypothesis which appears to me very improbable, since in the majority of cases no such spasm is present; I think we have here an instance of confusion between cause and effect, for we know that hyperacidity of the gastric juice occasionally produces tonic spasm of the pylorus, even in the absence of any ulcer.

Statistical data furnish but few facts likely to be useful in respect of diagnosis. I have investigated some 1,080 cases of gastric ulcer during the last ten years. By classifying these cases according to sex and age, I obtain much the same results as other authors, and I may say the same of the mortality.

With regard to the physical symptoms of gastric ulcer, I do not hesitate to introduce the sound, in order to confirm a doubtful diagnosis; but as a rule I abstain from its use in cases in which there is no room for doubt. In the presence of profuse hæmorrhage I think, however, that we are justified in employing the sound and in irrigating the mucous membrane with iced water, but only for therapeutical purposes.

I have been struck by the large number of cases of gastric ulcer not presenting any hyperacidity. I noted hyperacidity in only 56·8 per cent. of the cases. I observed on several occasions great fluctuations in the degree of the acidity, which oscillated between 28 and 44, 36 and 78, 38 and 54, 29 and 75, &c. The point is one of great importance in cases in which the ulcer subsequently underwent cancerous degeneration. Lactic acid was always absent in my cases. Long bacilli were also often absent.

The gastric juice of many of my patients contained blood, although the vomit was not blood-stained, and although the contents of the stomach presented no particular characteristics. Hæmatemesis was observed in 203 cases out of 304 (125 men and 78 women). The value of this symptom in the differential diagnosis is very great, but we must make quite sure that, in a particular case, the loss of blood is not of another origin. I may call attention particularly to three sources of error: vicarious menstruation, hæmorrhages due to grave septic infection, and parenchymatous hæmorrhages.

I cannot accord to hæmorrhagic erosions the status of a morbid entity. My own observations, particularly in respect of the gastric juice obtained by means of a tube, and also in the fragments of mucous membrane which came away in the water used in irrigation, lead me to the conclusion that we here have to do with accessory lesions of no particular importance, which heal rapidly, or possibly the early stage of round ulcers, which later on run their usual course.

For twenty years we have made no progress from a diagnostic point of view in the localisation of gastric ulcer. We can only guess, except when we find a tumefaction of the pylorus, the symptoms merely enabling us to suspect the existence of a round ulcer. The differential diagnosis must bear upon (1) the pyloric spasm, (2) a muscular hypertrophy or a cicatricial tumour, (3) a cancerous neoplasm.

There are cases in which it is practically impossible to form a definite opinion, even after minute histological examination, whether we have to do with a slight lesion or a malignant growth. I had two patients in whom, after extirpation of an apparently innocent stricture, the microscopical examination having failed to reveal any cancerous stricture, yet a few weeks later cancer developed. I have elsewhere drawn attention to the fact that malignant tumours are propagated in the mucous and sub-mucous tissues, well outside their apparent limits, and these peculiarities increase the difficulties of the radical operation.

The pain in round ulcer is far from being always typical, especially in cases which run a chronic course, when they are easily confused with gastralgic manifestations from other causes; this is particularly the case in respect of gastralgia associated with the first stage of phthisis, or even in incipient tabes, but I have also remarked it in hernia of the linea alba, which, as I have pointed out on several occasions, may lead to errors of diagnosis, the pain attributed to a round ulcer sometimes disappearing after the hernia has been operated upon.

Loss of flesh and cachexia are comparatively rare in gastric ulcer, and are only observed in nervous subjects, or in obese persons, who have taken less food on account of the pain. In such cases the loss of flesh may render the diagnosis doubtful.

Hypertrophy of the lymphatic glands is only of secondary importance. The state of the tongue is much more important; in cases of ulcer of the stomach the tongue is generally red, moist, with little, or not at all furred.

The complications of gastric ulcer may become the source of very great trouble. Perforation into the abdominal cavity is generally easy to diagnose. Nevertheless, I was once led into error in a case of perforation of the appendix, accompanied by profuse hæmatemesis. We have no means of discovering whether perforation is imminent. The sooner an operation is performed the greater is its chance of success; but the difficulty of the operation may be enormous if the ulcer is extensive, and if the perforation occurs in the centre of a large ulceration.

Among the "chronic" complications of gastric ulcer may be mentioned hour-glass contraction of the organ. In addition to the usual symptoms (the impossibility of withdrawing a large quantity of the water injected, gurgling restricted to the pyloric region, and unilateral distension when air has been pumped in), the diagnosis may be facilitated by the introduction of a thin india-rubber balloon having the shape of the stomach, which is filled with air when in position; this balloon only distends the cardiac end of the stomach, whereas insufflation dilates the whole stomach.

It is often impossible for us to ascertain whether the ulcer has involved the neighbouring organs; at other times, on the contrary, the symptoms are evident (perforation into the pleura, into the pericardium, sub-phrenic abscess, perforation into the large intestine, &c.). The secondary lesions may be mistaken for years for functional neuroses; this is particularly the case in the event of peri-gastric adhesions. The diagnosis must be based on the anamnesis (round active ulcer), on the fact that the pain is always limited to the same spot on the proportion of hydrochloric acid being increased or diminished, and on the existence of vomiting unaccompanied by gastroectasis.

An operation has often cured patients who were supposed to be suffering from manifestations or from over-acidity or gastric catarrh.

In young chlorotic subjects a diagnosis is often impossible; we should then try the effect of treatment for gastric ulcer, a treatment the effects whereof are *nil* in neurotic cases, but very manifest if we have to do with an organic lesion.

I will not dwell upon the differential diagnosis of pyloric and duodenal ulcer, and inflammatory conditions of the biliary canals (gall-stone, tumours, &c.). I need only draw attention to the fact that in all cases in which the stomach is not directly involved the gastric juice is generally normal in character. Moreover, reflex neuralgia is sometimes of great value in arriving at a diagnosis; they occur when a gall-stone becomes impacted, and are met with in the intercostal spaces, in the scapulæ, often diffuse and periodical, they remind one of a latent intermittent fever, or congestion of the liver. Even then the surgeon is very often the first to throw light on the subject.

Ulcerations of the œsophagus are rarely the cause of errors of diagnosis; the localisation and nature of the pain and œsophagoscopical examination enable us to discard them: the same may be said of tumours or inflammatory affections of the lower part of the œsophagus.

With regard to the anatomical diagnosis of the gastric ulceration (a simple ulcer or even—an infinitely rare thing—tuberculous, syphilitic, diphtheritic or uræmic ulcers), this can be arrived at by the course of the affection. We must ascertain whether the ulceration is primary, or whether it has been developed in the course of another affection; moreover, in such case the ulceration remains latent; and is of anatomo-pathological rather than of clinical interest.

Transactions of Societies.

CLINICAL SOCIETY OF LONDON.

Meeting held Friday, October 10th, 1902.

Mr. Howard Marsh, President, F.R.C.S., in the Chair.

The President inaugurated the session by some remarks on the various ways in which new lines of work might be opened up for the society, which, he reminded them, was established for the furtherance of clinical science, based on direct observation and analysis of cases. He pointed out that medicine was not necessarily an inexact science since it was founded on biology, but there was this difference, that while astronomy and similar sciences worked on firm ground, that of medicine was ever changing. He admitted that progress might appear to be slow and by no means commensurate with the amount of energy and time spent in research work. He observed that the modern scientific mind tended in the direction of exact knowledge by direct observation as distinguished from their former knowledge, which was largely empirical. He mentioned that it had been suggested that it might be well to submit certain subjects of current interest to a sub-committee, who, after full discussion in the Society and adequate investigation, would give an authoritative opinion thereon.

Drs. Leonard Guthrie and Frederick E. Batten made a communication on

UNILATERAL ATROPHY OF THE OPTIC NERVE ASSOCIATED WITH HEMIPLEGIA OF THE OPPOSITE SIDE.

Three cases of this rare condition were described, and were to be distinguished from those in which atrophy of the optic nerve was bilateral, descending and dependent on damage to the optic tract on one side of the brain Here, the atrophy of the nerve was unilateral, ascending.

and due to injury of the nerve itself by occlusion of the ophthalmic artery or one of its branches similar to the blockage of the middle cerebral artery, which caused hemiplegia of the opposite side,

The first case was that of a woman, æt. 25, anæmic, and subject to headaches. Sixteen months before admission to hospital she had a fit during the night, and next day she was paralysed down the right side and had lost the sight of the left eye. On admission, twelve months later, she was still hemiplegic, and the right side and the left optic disc was completely atrophied. The heart and urine were normal. She died after being in hospital three months, during which she suffered severely from left-sided headaches, vomiting, and fits of Jacksonian type affecting the right side. At the autopsy occlusion of the left middle cerebral artery was found, causing atrophy of the convolutions supplied by that vessel, together with atrophy of the left optic nerve. The degeneration could be traced back into the left optic tract and also across the chiasma into the right optic tract, whilst the right optic nerve showed no degeneration, in accordance with the fact that a lesion of one optic nerve gives rise to ascending degeneration in both optic tracts. The occlusion of vessels in this case was probably thrombotic, and due to anæmia.

Case II.—A boy, æt. 12, fractured his left femur in October, 1900. In February, 1901, after union of the fracture was complete, he had a febrile attack of doubtful nature, which lasted about a week, and was associated with pain in left thigh. No cause for the pain could be discovered. A month later he became gradually partially paralysed on the right side. In May there were slight signs of optic neuritis (retro-bulbar) in the left eye and vision was very defective. In June the left optic disc was atrophied. By October, 1901, the hemiparesis had entirely disappeared, but the atrophy of the disc remained, although vision had improved. The boy was anæmic, but showed no evidence of endocarditis nor of rheumatism. Partial thrombosis of the left middle central artery and of some of its ophthalmic branches was probably the cause of the symptoms. As in Case I., the symptoms at one time were suggestive of new growth in the left central hemisphere.

Case III. was a woman, æt. 22, who had three eclamptic seizures nine days after giving birth to a child. After the third fit she became hemiplegic on the left side. Several fits, apparently without local inconvenience, occurred during the following three months. They then ceased. Three months after the first fit the woman found that she was almost blind in the right eye. When she came under observation four months later the left arm and leg were in the condition of hemiplegic mobile spasm, and there was atrophy of the right optic disc, which suggested to Dr. Rayner Batten the existence of post-retrobulbar neuritis rather than embolism of the arteria centralis retinæ. Her urine and heart were normal, and she showed no evidence of syphilis. The conditions might have been caused by embolism or thrombosis of the right middle cerebral artery and of its ophthalmic branches. Other cases of somewhat similar nature were enumerated, and the pathology and anatomy of the condition were discussed. It was concluded that unilateral atrophy of the optic disc, associated with hemiplegia of the opposite side, were suggestive of a vascular lesion.

Dr. **Alexander Francis** (Brisbane), introduced by Dr. Greville MacDonald, read a communication on the

NASAL TREATMENT OF ASTHMA.

The association of asthma and nasal disease had been noticed by various writers from the earliest times, but the general opinion among physicians at the present day seemed to be that little hope of obtaining permanent relief of asthma could be got from nasal treatment even in cases where nasal lesions were found. Most rhinologists, on the other hand, had faith in the local nasal treatment of asthma where obvious trouble exists, but none had suggested the advisability of treating the nose in cases of asthma when the organ was apparently normal; and yet, in the author's opinion such were the cases where the most hopeful prognosis can be given. Of the 402 cases here recorded, 346 had no apparent nasal lesion, and of these eight only obtained no relief from nasal treatment, while six cases were relieved by treatment, among fifty-six, which had polypi or other gross nasal lesions. (In addition to these failures, in seventeen cases the result of treatment could not be ascertained.) From treating these cases he had come to the following conclusions:—(1) That asthma is due to reflex spasm of the bronchial tubes; (2) that the irritation may originate in the nose. This is inferred from the intimate association between hay fever and asthma, as disclosed in various cases, and is shown more clearly by the immediate onset of asthma after certain injuries to the nose, examples of which he mentioned; (3) that asthma is not directly due to any mechanical obstruction of the nasal passages, and is not commonly caused by any gross nasal lesion. The association of asthma and polypi is not so common as is generally supposed. When they occur together he believed them more probably the result of some common factor, than that they have any causal relationship. The best results in his polypus cases had been obtained by cauterising the septum without touching the polypi, whereas in some cases the complete eradication of the polypi had intensified the asthmatic condition. In other cases where nasal obstruction from engorged turbinates and asthma occurred together the difficulty of breathing through the nose and the dyspnœa were unrelieved by rendering the nasal passages mechanically free, but were both instantly removed on applying cocaine to the septum; (4) that some part of the nasal apparatus has a controlling influence upon the respiratory centre, or there is in the nose, as it were, an agency through which the afferent impulses must pass. Many cases were mentioned, in illustration, where cauterisation of the septum had completely removed, up to the present time, all sign of asthma in patients where the exciting irritation was apparently gastric, cardiac, or bronchial in origin. Some of these cases were of many years' standing and of great severity.

Record of Cases.—Total number, 402 cases. *Nature.*—Nose apparently normal 346, polypus 32, other gross lesions 24 cases. *Results.*—Complete relief obtained 194, complete relief till lost sight of or still under treatment 30, great improvement 73, great improvement till lost sight of or still under treatment 50, temporary relief 20, slight relief 4, no record 17, no relief 14 cases. Males 282, females 120.

Dr. **Greville Macdonald** observed that in respect of a paper of this kind one was much more influenced by the name of the author than by the text, and this led him to remark that he had known the author from his earliest professional career as a conscientious and careful worker, one moreover who would not make a statement without adequate foundation. They were familiar with the intimate relationship between nasal disease and asthma, although opinions thereon varied very greatly. He admitted, however, that he was quite at a loss to explain the remarkable results recorded by the author. The sensitive areas of the septum had received his own careful attention in connection with hay fever and asthma. He referred to the case of a woman who had suffered greatly from asthma. She presented a polypoid state of the anterior end of the middle turbinal which was snared, since which time she had not suffered from asthma, although the septum had not been touched. In another case, in which the patient, æt. 27, was described as "a wreck from asthma," the removal of a large spur on the septum was followed by relief for four years. Even more remarkable was a case sent to him by Dr. Aveling, that of a boy in whom removal of adenoids was recommended for the relief of asthma. His brother, in examining the naso-pharynx, provoked free hæmorrhage and the operation was deferred, but the lad suffered no more from asthma. He thought these cases were quite inexplicable on any theory whatever. What he always expected to find was anterior hypertrophy of the turbinals and if that were removed he would expect to cure his patient. The paper would make him approach the treatment of cases of asthma in future with more hope of affording relief.

Dr. **Scanes Spicer** thought the balance of opinion was in favour of these intra-nasal operations giving relief in asthma, but he would not go so far as to use the term "cure." His own experience was that the galvano-cautery did not always give such marked relief as in the author's hands except when there was boggy swelling. He thought that an important factor in the production of asthma was a hyperæmic state of the nerves of the nose behind an obstruction, a point to which attention was first clearly called by Drs. A. H. Smith and Bosworth, of New York.

Dr. Burney Yeo, alluding to the author's observation that cauterisation of one side of the septum afforded relief on the same side of the chest, asked whether it led to the disappearance of the moist rales in the common class of cases of bronchial asthma in which there was more or less marked bronchial catarrh.

Dr. Herbert Tilley said he had been "absolutely astounded" by the author's statements. He recalled that after the publication of Hack's paper in 1884 there had been a period during which intra-nasal operations had a great vogue, yet at a discussion on the subject in which many eminent authorities took part only nine cases were mentioned in which asthma had been relieved by intra-nasal measures. He himself suffered from asthma, and he had been freely cauterised without relief. In a family of asthmatics under his observation the cautery had not done good in any one instance; he had also removed spurs, &c., without relief. He might sum up his experience by saying that when he undertook nasal treatment for the relief of asthma he always felt that he was not likely to add to his reputation. If, however, there were gross lesions, he would suggest the propriety of operating to the patient in the hope of obtaining relief.

Dr. Dundas Grant echoed the astonishment expressed by the last speaker, although in his own experience he had often seen relief follow treatment of some gross nasal lesion in asthmatic subjects, of which he gave several examples. Many, however, had not been benefited thereby.

Dr. Francis, in reply, explained that he had been led to the discovery by chance, so that the treatment was purely empirical, and he did not pretend to explain its action. He did not think the particular kind of asthma affected the value of the treatment. He related instances in which the relief was confined to the lung on the same side of the body as the cauterisation, the patients stating that they felt as if something had been loosened along the lower border of the ribs.

France.

[FROM OUR OWN CORRESPONDENT.]

PARIS, October 11th, 1902.

THE TREATMENT OF CONSUMPTION.

The treatment of phthisis, perhaps the greatest plague of humanity, had for many years been more or less neglected, probably on account of the universal belief that that malady was rebellious to all curative remedies. Change of air and symptomatic treatment constituted about nearly all the physician had at his disposition. But of late years tuberculosis has received the particular attention of clinicians, and, with the new scientific light thrown on the origin of the malady, phthisis is no longer considered incurable. The former despair has given place not only to hope but to absolute certainty of arresting the invasion of the microbe, when the affection has been early diagnosed and the subject is not otherwise wasted by congenital or acquired disease.

Within the last few months a series of theses have been written on the subject of the treatment of pulmonary tuberculosis, covering pretty well the ground, and may be regarded as quite up to date. Of these the following is a brief *resumé* :—

THE REST CURE.

Dr. Poussardin insists particularly on absolute rest. Rest, in his opinion, diminishes the accumulation of waste tissue, and favours their elimination. Fatigue on the contrary, constituted a kind of auto-intoxication. The air and diet cure are without result if the patient does not observe rest. By rest digestion is facilitated by leaving the organism to concentrate its strength on assimilation: by rest the nerve influx, which ought to sustain the struggle against the malady, is economised. Consequently tuberculous patients should be enjoined to take one hour's rest at least after each repast in a reclining chair and not sitting up. Besides, rest has a very decided influence on the temperature of the patient, while also by it oppression, expectoration, and hæmoptysis are diminished.

Dr. Berigaud endeavours to prove that the climate of high altitudes, by the absolute pureness of the atmosphere, is one of the best adjuvants to therapeutic treatment, especially in the case of those who are manifestly predisposed to consumption, and in initial tuberculosis of the apex of the lungs, and even where the malady had already developed to a certain extent, provided that the general condition of the patient was strong enough to bear the climate. High altitudes were, on the other hand, counter-indicated where the patient had arrived at the cachectic state.

ALIMENTARY REGIME.

Dr. Rousseau confines himself to the study of the rules of alimentation which phthisical patients should observe. The diet should be substantial but not forced. Useless to tell a patient who has a distaste for all food (anorexia) that he must eat *quand même*, the appetite would come all right. The physician should endeavour to excite the appetite by such things as the patient likes, and by degrees he will bring him round to take a fair diet. Raw meat made into a pulp, eggs, peas, different farinaceous foods should be preferred, milk, képhir render sometimes good services. The menu should be varied almost daily, and care should be taken not to, by an excess of zeal, stuff or overfeed the patient. The gastric juices cannot penetrate easily a large mass of food, and, if persisted in, would produce a dyspeptic condition from ataxy of the stomach.

Useless irritation of the organ should be avoided. Wine or alcohol should be suppressed and the patients recommended to drink pure water. For the same reasons such drugs as creosote, tannin, quinine, &c., should not be prescribed; while the use of condiments should be forbidden, or extremely limited.

MEDICAL TREATMENT.

The fourth thesis, that of Dr. Colombet, is confined to the medical treatment, and more especially to arsenio-phosphorated medication.

Arsenic and phosphorus have been employed for a very long time in the treatment of pulmonary tuberculosis, but in the mineral state. M. Colombet studied the therapeutic effects of these two metalloids associated in *organic combination.* After a series of comparative experiments, he fixed his choice on nuclinic acid, which he took by the method of Meischer from the "milk" of herrings. This acid he associated with methyarseniate of soda, and he submitted thirty-three patients in the hospital to that treatment. A considerable improvement was observed in nearly all the patients; the appetite returned, the fever diminished, as well as the night sweating. Cough and expectoration decreased, and the author noticed a decrease in the number of bacilli; nearly all the patients increased in weight, and about half of them left the hospital to return to their work, alleging that they felt quite strong again. Examination of the physical signs showed a considerable improvement (disappearance of dry and humid rales). The urine was frequently analysed. The elimination of the chlorides underwent no notable change while the loss in phosphates diminished where it had exceeded the normal quantity.

A Hospital Loan.

For some years past the condition of many, or at any rate of some, of the Paris hospitals has been the subject of unfavourable comment. It has now been decided to raise a loan of forty million francs (£1,600,000) to bring them into conformity with modern sanitary requirements. The loan will be floated by the municipality, the hospitals of Paris being maintained out of the rates, and the security will take the form of a charge upon the *octroi* receipts.

Germany.

[FROM OUR OWN CORRESPONDENT.]

Berlin, October 11th, 1902.

The Rational Treatment of Oxaluria.

In the *Therap. et Gegenev.*, 7/1902, Hr. Rosin discusses the subject of oxaluria. His observations on a case —that of a man, æt. 52, with oxaluria—form the basis of the communication. The patient was treated by the method of Klemperer. Before commencing treatment it was ascertained that the urine, normal in amount, was turbid, contained a considerable amount of sediment which contained the well-known crystals, hyaline or finely nucleated casts, and epithelium of varied origin, but no albumen. The patient was now put on the special diet, from which vegetables, especially cabbage and spinach, were excluded, also tea, cocoa, milk and eggs, whilst carbohydrates, roots, fats and fruit, such as apples and pears, were allowed. Fresh meat, which is generally allowed, was permitted only in small quantities on other grounds (arterio-sclerosis, suspicion of contracted kidney). Effervescing drinks were allowed freely, lemonade and small quantities of Epsom salts three times a day. The result was surprising. Even by the end of the first week all the crystals had disappeared from the urine even when this was centrifugated, although they had been present for years previously. When after the end of a month the magnesia was stopped, the crystals still remained absent. The excretion of casts was unchanged, and also the pain in the region of the kidneys.

Case of Cerebral Abscess Simulating Atropin Poisoning.

Dr. A. Aufrecht reports this case in the *D. Arch. f. Klin. Med.*, 72, 5 and 6. The patient, a labourer, had received an injury five years previously, some sacks of sugar having fallen on him. From this time the patient complained of violent pain in the right breast, with which later on asthmatic and anginal attacks became associated. As examination gave a negative result, V. Noorden's atropine treatment for asthma was begun (14·4 mgrms. three times daily). Two days later the man was found huddled up in his arm chair and unable to rise. He complained of headache, was confused, and spoke with difficulty. There were transient tremors of the right arm. The pupils were widely dilated. It appears now, accidentally, as was later on discovered, that the pills contained 0·1 gr. atropine in ten pills, instead of 0·01 gr. The man had only taken two of the pills, and the writer rejected the idea of atropine poisoning some hours later on finding the pupils no longer dilated and reacting normally to light. Nothing particular was observed during the following day, but on the day after convulsions occurred, which lasted several hours. During complete unconsciousness, the left half of the face and the left arm were the seat of violent twitchings; these only ceased after the injection of 0·018 gr. of morphia. In the afternoon the patient was again conscious and complained only of headache. No vomiting, pulse between 66 and 72. In the evening he could not speak a word. (It is to be noted that the man was left-handed.) The next day there was difficulty of swallowing; in the afternoon there was violent pain in the chest lasting for two hours, and also in the right arm. There were numbness and weakness in the left arm, the leg unaffected; difficulty of swallowing; pulse 54, temperature normal; the inability to speak continued; complete paralysis of the left arm, and now the corresponding leg became affected, spasm of the right side of the face lasting an hour. Complete left-sided hemiplegia now came gradually on, loss of consciousness, food could not be taken, and death took place three and a-half weeks after the commencement of the illness. A diagnosis had been made of disease in the right anterior central convolution, the sudden commencement pointing to hæmorrhage.

The autopsy showed an abscess the size of an apple in the right temporal lobe, which reached to the margin of the right anterior central convolution, and had destroyed a considerable portion of it (1½ cm.). The wall of the abscess was completely organised. It was plainly of old date as to origin. The cause must be looked for in the injury sustained five years before. From that time to the onset of the fatal symptoms, no cerebral symptoms had been observed beyond the peculiar oppression, the difficulty of breathing, and the pressure on the chest, which the autopsy showed to be quite normal.

In a case of Gerhardt and Schott an abscess had remained latent twenty-one years, and in one of Hosslin's twenty-six years, and in Nauwerck's case twenty-eight years.

At the Dermatological Society Hr. Hollstein showed a woman, æt. 48, with all the symptoms of

Local Asphyxia and Symmetrical Gangrene

of the finger (Raynaud's disease). Asphyxial attacks occurred, characterised by both arms "going to sleep," "deadness" of the fingers, dark blue colouration of the nails, followed by inflammation culminating in gangrene. Cold appeared to favour the development of these attacks.

Hr. Nagelschmidt reported some experiments on the

Bactericidal Power of the Finsen Treatment.

He rubbed tubercle bacilli into the shaved and scarified skin of guinea pigs, from which an apparently tuberculous inflammation developed. The diseased parts were then subjected to the Finsen light for an hour, when they were cut out, rubbed up, and injected into the peritoneal cavity of other guinea pigs. Some of the animals so treated remained healthy, while certain animals injected with similar material that had not however been subjected to the Finsen process all died. It appeared as if the treatment brought about a reduction of virulence in the germs.

Austria.

[FROM OUR OWN CORRESPONDENT.]

Vienna, October 11th, 1902.

Pemphigus a Neurotic Disease.

SCHROTTER, at the Congress for Internal Medicine, related the history of a case confirming the view expressed by many in respect of the etiology of this disease. The patient was a female, æt. 59, who was suddenly affected with a troublesome affection of the mucous membrane, resembling pemphigus, which finally developed into pemphigus foliaceous of an acute character. Three months after the onset she died. Along the whole length of the central canal of the spine the ependymal cells were increased with patches of greater intensity and thickening of the tissue. In the upper part of the dorsal section there was a sort of splitting of the tissues with capillary hæmorrhage, the latter occurring more particularly in the grey substance.

Leube said he could confirm this observation by a case of his own, in which pemphigus was undeniably of a neurogenic origin. His patient was æt. 6, and was recovering from typhoid when he suddenly became ill, followed by motor aphasia and pemphigus, with large blisters on the face, ear, &c. Both the aphasia and pemphigus disappeared after eight days.

Tuberculosis and Carbonic Acid.

Weber read a long paper in support of the view that carbonic acid was a cure for tuberculosis; he adduced much direct evidence to support the theory. Tuberculosis of the lung usually commences in the apices when the supply of venous blood is scanty. Hamburger supported this theory by experiment, since he found that venous blood was a potent bactericide, while arterial blood encouraged the growth of bacteria. Bier has also proved in surgery that congestion of the osseous vessels cures tuberculous bone. Again, heart disease is a powerful immunising agent in producing passive congestion and hyperæmia of the lung, thus preventing phthisis. During pregnancy the wasting of the lung is usually checked by a retention of the carbonic acid in the blood. In diabetes, on the other hand, we find that half the sufferers die from phthisis due probably to the elimination of the carbonic acid in the form of sugar.

The production of fat and carbonic acid may be regarded as collateral terms, since phthisis commences with a great and rapid loss of fat, while recovery is heralded by an increase of fat. When diet of easily-burned material is used, such as levulose, there is not only an increase of fat but a large amount of carbonic acid produced, which exerts a specific action on the tuberculous bacilli.

We may conclude therefore that increased nutrition increases the carbonic acid in the system, and thereby acts as a toxin and affords protection. From this reasoning the most rational treatment would be by injecting a carbonaceous fluid, such as paraffinum liquidum purissimum, to increase the carbonic acid.

Rosenfeld thought this form of treatment had neither sufficient theoretical evidence nor practical results to prove its value.

Light on System.

Biè gave a *résumé* of the present views prevailing on the application of the different lights at present in use. Finsen, he said, had used red rays in small-pox, and by its chemical action on the skin had prevented the secondary fever that is occasioned by the purulent vesicle and also prevented cicatrisation. His experiments with the same light on other exanthemata had given negative results.

Backmann and Chattrière asserted that they had got good results with the red rays in measles, while Krukenberg spoke equally well of his results in erysipelas.

Kellogg said he had constructed an incandescent lamp for the hot bath, which he praises, but his results are attributed more to the perspiration induced by the hot bath than by the light.

It is interesting to note here that nationality has something to do with the results. In Russia, for instance, nothing remarkable has been observed. Minin, who is the Russian representative, tells us that he has used both the incandescent and arc lights with no perceptibly beneficial results.

The therapeutic light of the future seems to be the sun bath without subsequent packing, or an electric arc-light bath with a current of from 150 to 200 ampères and without perspiration. We know far too little yet of light therapeutics to dogmatise, Finsen's results on the skin are really all that we have to build a superstructure upon, and these are mostly of a cosmetic character as far as has yet been recorded. The advantages of this treatment are that the surroundings as well as the morbid centre are treated, which may account in some measure for the non-recurrence of the disease, and probably also relieves the contraction that often occurs in other cicatrices, as these are usually soft and smooth.

There are other advantages, such as the absence of pain and a freedom from danger. The curative effect, judging from the results of 640 patients, is excellent; eighty-five of them were perfectly cured for the time being, while 15 per cent. were slightly improved, but not cured.

The results in lupus erythematodes are only of an average character, but the treatment is certainly successful in alopecia areata, nævus vasculosa, acne vulgaris, acne rosacea, and epithelioma cutaneum.

Jaksch dilated on the calming and soothing effects of the blue rays, to obtain which he used cobalt globes for lighting the hospitals at night.

The incandescent baths were void of any good result beyond the benefits resulting from an ordinary warm bath.

Quincke referred to his own experiments with sunlight on active tissue, such as in the formation of pus, where a large amount of acid material was used up. In this condition there is certainly an amelioration of the diseased condition, both subjective and objective, which proves that the light must have a beneficial influence on the metabolism of the organism.

Rumpf spoke in favour of the incandescent hot bath, which he thought was very efficacious at low temperatures for heart affections. The skin is more tolerant of the arc light, and is best adapted for use in health. The arc light acts very efficiently on erysipelas, either with or without the blue disc; this he had frequently found useful in neuralgia.

Hahn thought the Finsen rays were only useful in skin diseases, and more particularly in lupus, but recurrence was not prevented. The action is not bactericidal, but inflammatory. In the arc lamp the ultra violet are the most efficacious rays, and can be best obtained by substituting an iron for the carbon electrode, as in Bang's lamp. All light treatment fundamentally depended on the Röntgen ray, although Finsen's method was sometimes useful.

Marcuse had treated 400 cases with both arc and incandescent for the hot bath, and found the latter the best for heat and producing perspiration. In some cases the heart was affected by it, but it has no effect on obesity.

The arc light is useful in cases of neurosis, but locally it is useless, unless by suggestion. The light therapy is best performed by the solar rays, but at the same time he could not refrain from expressing his own conviction that the whole subject was tainted with charlatanism.

The Operating Theatres.

ST. THOMAS'S HOSPITAL.

Operation for Acute Intestinal Obstruction.—Mr. **Battle** operated on a married woman, æt. 33, who had suffered from symptoms of obstruction of the bowels for a period of five days. She first of all complained of pain in the abdomen and in her back, which as it increased in severity became paroxysmal and was accompanied with vomiting. The bowels also were constipated, and she was unable to get any action even with medicine; no relief has been afforded by medical treatment, and for two days the abdomen had become more and more distended; there had been no fever. The history of the case was as follows:—Four years previously she had been in St. Thomas's Hospital under the care of Mr. Battle for appendicitis, and the appendix had been removed through the incision usually employed by him; at the same operation a cyst had been removed from the right broad ligament through an incision in the median line below the umbilicus. Since that operation the patient had enjoyed very good health and had led a fairly active life, sometimes going on cycling excursions. During one of these trips three months ago she was thrown violently from her machine and the handle bar struck her in the abdomen. After this she was laid up with abdominal pain and vomiting, and had to keep her bed for nearly a month. Her symptoms then passed away and had not returned until the commencement of the present illness. On admission to the hospital she was sick and had a somewhat dry tongue, although she did not look greatly distressed. The abdomen was rather distended, and she complained of pain chiefly in the lower part and on the left side. Here there was some tenderness on pressure. She had evidence of free fluid in the abdomen. The scars of the former operations were firm and strong, there had been no yielding, and the one in the appendix region was hardly visible. It was considered that her symptoms arose from the presence of a band which had probably formed as a result of a localised peritonitis following the injury received from the handle of her cycle. At the operation an incision was made through the left rectus muscle and the abdomen opened; there was some free fluid in the peritoneum, which ran out, and a distended coil of small intestine was seen on the left side. This was lifted up, and below it a contracted portion of bowel was seen and a thick, strong, fibrous band crossed the part where this joined, passing from mesentery above to mesentery below; it did not completely obstruct the bowel, and although the gut was marked by its pressure it did not show signs of ulceration or sloughing. It was divided between forceps and a ligature placed on each end. The loop of distended bowel could not be readily returned into the abdomen, so it was punctured with a needle and emptied of its contents, the opening being closed by one or two Lembert's sutures. The uterus was large, corresponding to a two months' gestation. More of the fluid in the abdominal cavity was removed by a sponge and the wound closed. Mr. Battle pointed out that he considered the case was probably one of obstruction due to a band because of the history of injury followed by symptoms of abdominal inflammation three months before. He also regarded the case as one of a subacute character from the evidence of fluid in the peritoneum, this being thrown out from bowel which had not been completely closed. The pain being situated on the left side of the abdomen, and still more the period that had elapsed since the previous abdominal operations, made it improbable that it had anything to do with them. The band was a firm one and more vascular than usual; it was carefully examined to see that it was solid and not a tube, such as stretched Meckel's diverticulum, for he had known a division of a Meckel's diverticulum without proper treatment to prevent escape of intestinal contents from it prove fatal.

The patient made a very satisfactory progress after the operation, but complained of pain in the lower abdomen; a loss of blood from the uterus, which had commenced before admission, continued, and abortion took place a few days later.

Tuberculosis and Lunacy.

In a recent number we drew attention to the alarming prevalence of consumption in our lunatic asylums. At the last meeting of the Metropolitan Asylums Board it was shown that in England for the year 1899 nearly one-fourth of the asylum patients who died were tuberculous, in Scotland one-fifth, and in Ireland one-third. It is generally admitted that a large number of the patients contract the disease after admission to the asylum. It has been proposed that for the consumptive lunatics in the Metropolitan district, Darenth Asylum should be employed exclusively. The matter, we understand, is now under consideration.

The inaugural meeting for the session of King's College Hospital Medical Society will take place on Friday, October 17th, when Sir John A. Cockburn, K.C.M.G., M.D., will deliver an address entitled "Opportunity and Preparation." The meeting will be held in the Operating Theatre, at eight p.m., the chair being taken by the President, L. Vernon Cargill, Esq., F.R.C.S.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 15, 1902.

LONGEVITY IN TOWN AND COUNTRY.

The great practical test of advance in public health is afforded by the life-table of a community. It shows, as most of our readers are aware, the mean expectation of life at each age and for each sex for a given period. It is obtained by taking a million children and following their history through the whole of their lives. It is so arranged as to eliminate errors due to sex and age constitution of the population, and it shows pretty clearly the results of various factors of environment which affect the mortality in different degrees at different ages of life. So far the life table affords the best means of ascertaining the several factors that weigh either in favour of or against longevity. In short, it is one of the most advanced statistical methods whereby it is possible to estimate and record the results of modern preventive methods in the unceasing battle waged by scientific sanitarians against disease and death. As regards London, the first extended life table dealing with its population has been recently issued by the London County Council. It is a valuable document, and covers the decennial period 1891-1900. The deaths of Londoners in the country and *vice versâ* had as a first step to be ascertained, with other precautions and calculations that need not be here entered into. Some of the resulting tables possess the highest suggestive and actual value. The "expectation of life" table, for instance, at certain ages in London, 1891-1900, with those of selected healthy districts, 1881-1890, show that there is still great room for improvement in London mortality. From this table, which appears in the next column, it seems that a male child born in London has a reasonable chance of living for about forty-one years, whereas in a healthy country district he would live probably eleven and a half years longer. At the age of forty-five a Londoner might expect to live twenty years and a half longer, as against the twenty-five years if resident in the more healthy districts. These figures afford an eloquent testimony indeed against the overcrowding of our town populations. An exceedingly valuable comparison is that which compares the expectation of life in London with that of three other towns, and of England and Wales as a whole.

Age.	Expectation of Life.					
	Males.			Females.		
	Healthy country districts 1881-90.	London. 1891-1900.	London to country districts taken as 1,000.	Healthy country districts 1881-90.	London 1891-1900.	London to country dists. taken as 1,000.
0	51·48	40·98	796	54 04	45 33	839
5	57·05	51·60	904	58·01	55·12	950
10	53·07	47·84	901	54·01	51·49	953
15	48·62	43·40	893	49·68	47·10	948
20	44·41	39·13	881	45·62	42·77	937
25	40·39	34·96	866	41 71	38·46	922
35	32·70	27·25	833	34 16	30·42	891
45	25·19	20 65	820	26·56	23·29	877
55	18·00	14·76	820	19·06	16·72	877
65	11·60	9·76	841	12·36	11·01	891
75	6·56	5·91	901	7·14	6·57	920
85	3·30	3·48	1,055	3·77	3·75	995

Age (Males).	London, 1891-1900.	Glasgow. 1881-90.	Manc'st'r, 1881-90.	Brighton, 1881-90.	England and Wales 1881-90.
0	40 98	35·18	34·71	43·59	43·66
5	51·60	46·97	45·59	52·87	52 75
10	47·84	44·32	42·75	49·12	49 00
20	39·13	36·90	34·62	40·55	40 27
25	34·96	33·29	30·69	36·51	36·28
35	27·25	26·06	23·76	29 02	28·91
45	20·65	19·54	17·80	22·36	22·06
55	14·76	13·99	12·49	16·48	15·74
75	5·91	5·96	5·11	6·64	6·10

The expectation of a London baby at birth is 40·98 years, that is to say, about two and a half years less than that of the average for England and Wales. A Glasgow baby will live five years less on the average, a Manchester baby six years less, and a Brighton baby nearly three years more. These figures point broadly to a lower standard of environment in Glasgow and in Manchester than in London generally, It is more than likely, however, that the less healthy and more populous districts of London would prove no more favourable to longevity than the environment of towns like Glasgow and Manchester, with their large proportion of poor and of artisan citizens. Brighton is especially favoured by virtue of its position as a seaside town with a well-to-do resident population and an absence of manufactures. As regards London women the average expectation of life at all age periods is now above that of men. Formerly the ratio sank below the male rate during some part of the child-bearing period. Thanks, however, to improvements in midwifery, notably the introduction of antiseptic and aseptic methods, the figures have been changed, so that women have now a better chance of survival at all ages than men. Students of vital statistics will find the recent publication of the London County Council, from which the foregoing facts have been culled, an invaluable contribution to the literature of the subject.

THE "CURE" OF CONSUMPTION.

Much difference of opinion appears to exist as to the justifiable use of the word "cure" as applied to consumption. The hesitancy to adopt it in its customary meaning seems to indicate that the old pessimism regarding pulmonary tuberculosis still lingers; and the scepticism as to the benefits of "hygienic" treatment is by no means dead. Dr. Davies, the Medical Officer of Health for Bristol, in his interesting study of the "Objects and Benefits of Sanatoria," published in his last annual report, dogmatically affirms that "strictly speaking, there is no such thing as cure in consumption. The best that can be hoped for is that the injured tissues will heal up, only a scar being left." But, as if to limit the alarm which might arise from such a startling statement, he adds: "A large proportion of the population of England and Wales are in this condition, and they are able to do satisfactory work for the rest of their lives," and still later we find comfort in the remark that "in a very large proportion of cases the 'cure' is permanent." We do not wish to appear captious, but we think the day has gone by when Laennec's dictum is to be re-stated "L'affection tuberculeuse est comme les affections cancéreuses, absolument incurable." Dr. Theodore Williams we know has repudiated the use of the word "cure," and has proposed that we should not commit ourselves to anything beyond an "arrest" of pulmonary tuberculosis. We venture to think that Sir James Crichton-Browne, at last year's Congress, clearly indicated the opinion of the best pathologists and most experienced clinicians:—"In almost every cadaver there are what may be called the first remains of palæozoic disease; but because we observe in the ileum the obliteration of some of Peyer's patches, we do not say that an attack of enteric fever which happened perhaps forty years ago was arrested and not cured; because we find on the breast a cicatrix marking the site of a carcinomatous tumour removed ten years previously, we do not maintain the incurability of cancer. Then why, I would ask, should the presence of a calcareous nodule or fibrotic patch at the apex of a lung justify us in arguing that phthisis once planted is ineradicable?" We certainly think that the contention of Sir James is both logical and scientific. But we would like to point out that in the eagerness to claim the utmost benefit from sanatorium treatment there is a great danger of using wrong terms. In most instances institutional treatment does little more than secure "arrest" and prepare the way for those reparative processes which in their completion establish "cure." We would suggest that the term "cure" be never applied to any cases until at least two years have elapsed after leaving the sanatorium By some such arbitrary arrangement a certain degree of reliance on sanatoria statistics will then be possible. But in spite of all, the indisputable records of the post-mortem room clearly establish the fact that, taken as a whole, pulmonary tuberculosis is one of the most curable forms of infectious disease.

ARSENICATED TOBACCO.

The deplorable outbreak of arsenical poisoning due to contaminated beer, which startled the whole country some eighteen months since (The Medical Press and Circular, November 28th and December 12th, 1900), not only led to the appointment of the Royal Commission, still slowly collecting evidence, but focussed the attention of the profession and the public on the possibility of arsenic proving an important factor in the production of various morbid conditions. It seems to have been proved that much of the so-called "alcoholic neuritis" —for so long a most common affection in Manchester and district—was really dependent, at least in part, on the presence of small quantities of arsenic in the alcoholic beverages so largely indulged in. "Alcoholic heart," a condition so ably studied by Dr. Graham Steell and other clinicians in the North of England, is said to have become comparatively rare since the malt liquors of the district have been purified of their arsenic. And, as is well known, Mr. Jonathan Hutchinson has collected much data which he holds furnish a strong indictment against arsenic as an etiological factor in the development of "cancer." Attempts have also been made to prove that the mysterious disease known as "beri-beri" was really a form of arsenical neuritis. In showing the shortsightedness of those who have propounded this view, Dr. Patrick Manson has drawn attention to the very serious matter of the arsenical contamination of tobacco. It seems that the Chinese, for instance, not only use arsenic largely in the arts, and sometimes in agriculture, but also very often in their tobacco. Dr. Manson says that he had received samples of Chinese tobacco, to which arsenic had been intentionally added, with the object of giving it a peculiar and much-relished garlicky flavour. The custom is said to be common in China. Now, it is well known that at the present time tobacco is being introduced into this country from all quarters of the globe. Fastidious smokers are insisting on having blends of new and fanciful forms. The artistic names given to many varieties on the market afford but little guide to their origin or manner of preparation. We are not aware that arsenicated tobacco is being widely used, but we fear our worthy analysts have not been in the habit of testing tobacco for this deleterious agent, and we venture to think the Commission now sitting might direct their attention to this matter, and at least furnish us with such evidence as may allay all fears concerning the purity of the much-loved weed.

Notes on Current Topics.

Ascites and Surgery.

Since the original publication by Talma, of Utrecht, of his operation for the relief of ascites due to cirrhosis of the liver, numerous modifications have been suggested by surgeons with the same object in view. Even a moderate amount of success is sufficient to justify operative interference, for there are few conditions more hopeless of improvement by medical means than ascites due to this cause. Dr. Hall White, indeed, has calculated that in cases where the ascites is grave enough to demand tapping, the expectation of life is only sixty-three days. The fundamental assumption of Talma's procedure is that the ascites is due to physical obstruction of the portal circulation, and the method of treatment is to endeavour to relieve the portal circulation by effecting an artificial anastomosis with the parietal vessels. The various schemes proposed have met with a varied success, but certainly the simplest is that recently described by Mr. Peters, of Toronto. (a) His plan is to open into the abdominal cavity, evacuate some of the fluid present, and then, having raised two or three straps of peritoneum from the underlying tissue, insert under each a portion of the omentum. He fixes these by a few stitches, and closes the wound. Mr. Peters has only had an opportunity of testing his operation in two cases as yet, but both have been very successful, although they had been previously treated by repeated tappings without any good result.

Snake-Poisons and Anti-Venin.

At the Malarial Convention held at Nagpur, Captain George Lamb, I.M.S., of the Bombay Research Laboratory, gave a very interesting discourse on the differences between the effects of the *cobra* and *daboia* poisons. A knowledge of these is most important to all who attempt to investigate, or appreciate, the value of Calmette's anti-venomous serum. Indeed, the results of Captain Lamb's researches have given him data which show important differences from those already reported by Martin Cunningham and Calmette. He shows that the action of the cobra poison is primarily, and principally, on the central nervous system. Its activity is secondarily manifested on the blood, of which it breaks up the red corpuscles and sets free the hæmoglobin. On the other hand, the action of the *daboia* poison is mainly, if not solely, on the circulatory apparatus. Its effects are thus tabulated by Captain Lamb:—(1) It affects the coagulability of the blood; injected directly into the blood-stream or in large doses under the skin it so increases this as to cause extensive intravascular clotting. In small doses it causes, after no doubt a short-lived phase of increased coagulability, a marked and prolonged phase of diminished coagulability. So that in some instances I have noticed the shed blood remains absolutely unclotted even after twenty-four hours. (2) It has a destructive action on the red blood cells, breaking these up and setting free the colouring matter contained in them. (3) It has a marked destructive action on the capillary walls, rendering them more permeable to their fluid contents. (4) It has a marked depressing action on the heart, so marked indeed as to sometimes lead to fatal termination from this action alone. (5) It has no action on the central nervous system, and there is therefore no paralysis ever observed. A depressing practical revelation is contained in the fact that Captain Lamb "has demonstrated in many experiments with different animals that Calmette's serum is of no avail whatever in counteracting the poisonous effects of the daboia venom." He also informs us that this serum has little or no effect in neutralising the poison of *Bungaris fasciatus*. So that there is still ample scope for further investigations in this important field for Captain Lamb; and, probably, indeed, for many others.

The Simpler Life.

An interesting correspondence has recently found place in the columns of *The Spectator*, in which the advantages of a simpler mode of living has been graphically portrayed. The life of many a Londoner is encircled by artificialities; the daily round of most citizens is pursued in an atmosphere artificial and enervating; and even in quiet country centres there is much in the environment that is antagonistic to natural existence. Our purpose in drawing attention to this matter is not that we may suggest any radical alterations in manner of life or habit of thought, but to insist on a more thorough probing of the subject than is accorded by the average letter writer. There is a physiological basis for the simpler life, and psychological reasons for a natural existence. Man is capable of wonderful adjustments. His powers of adaptation to environment seems limitless. The reserve force of human vitality cannot well be estimated. Under the most deteriorating influences there is still retained immense power to return to the normal when opportunity allows. Although physiological processes are so complex as to evade all efforts for the complete unfolding of their mystery, yet the maintenance of each in healthy activity is easily procured by the avoidance of inhibitory influences. Hygiene indicates the path of healthy life. A simple life rightly understood is one which is physiologically sound.

Hypnotism—Its Use and Abuse.

Hypnotism, while undoubtedly serviceable in the treatment of certain morbid states, is itself capable of engendering morbid conditions. It is an agent which should only be used by those whose judgment and good faith are assured. The possibility of abuse is generally recognised, and Dr. F. W. Edridge-Green and Mr. E. G. F. Bousfield in the current number of *The Contemporary Review* present evidence to show that there is immediate danger arising from the uncontrolled employment of hypnotism in this country. It appears that advertisements are now appearing setting forth the merits of various courses of instruction which profess to teach "hypnotism," "personal magnetism," "the science of personal influence," and the like. It seems probable that within the last twelve months some thousands of hypnotists have been let loose upon the world. The danger arising from unregulated use of such an agent cannot be overlooked. The time has come when the practice of hypnotism should be carefully restricted, like that of vivisection, to qualified persons only, in whose hands it may be used for the benefit of humanity and not for mischievous purposes.

(a) *Canadian Journal of Medicine and Surgery*, September, 1902.

Sanitary Matters on the Riviera.

FOR long it has been realised that more perfect hygienic arrangements were desirable in many of the towns along the Riviera. On several occasions we have drawn attention to the primitive methods employed in many fashionable and much-frequented health stations. The experience of last season clearly demonstrates the need for reform. We are glad, therefore, to learn that at Nice sanitary improvements have been secured, and that a hospital for infectious diseases has been provided in a convenient but isolated spot in the neighbourhood. If the Riviera seeks to attract visitors it must spare no pains to ensure the best conditions for health.

The Statistics of Chloroform Poisoning.

IT is usual at inquests held on persons who have succumbed to chloroform narcosis, unfortunately of very frequent occurrence, for the Coroner to reassure the jury by giving them to understand that the proportion of deaths is only about one in four or five thousand administrations. It would be interesting to know what authority there is for this statement, especially as the proportions given by medical witnesses on such occasions vary within very wide limits; witness the statement at the inquest at Guy's Hospital last week, when it was put at one in a thousand. The former estimate may be approximately correct in regard to the use of ether, but the mortality from chloroform is certainly much nearer the latter figure, not because chloroform is necessarily a more dangerous anæsthetic, but because it is a more powerful drug, requiring to be used with greater prudence. Moreover, and this is doubtless an important factor in determining the comparatively high mortality, it is the anæsthetic commonly employed by precisely those persons who have least experience in this department, and is, in addition, in the immense majority of cases, given in a rough and ready way on a towel or handkerchief, that is to say, with an absence of precautions which greatly enhances the dangers inseparable from any method of anæsthetisation. Not one practitioner in a hundred understands the use of an inhaler, and this of itself is a sufficient explanation of the fact that it is quite the exception for any inhaler to be used. One of these days the public will awaken to the desirability of imposing greater caution in the use of these beneficent but, in unskilled hands, dangerous drugs. Within the profession opinions, for some reason, are so hopelessly divided as to the proper methods of administration that no uniform and trustworthy method of administration is likely to receive general assent.

Intra-Nasal Disease and Asthma.

ALTHOUGH for years a relationship has been known to exist between intra-nasal diseases and abnormalities and the production of asthma, wide divergence of opinion exists between specialists as to the frequency of the relationship, and especially as to the efficacy of intra-nasal treatment for the relief of the asthma. The apparently contradictory conclusions of those best qualified to judge must be due to the fact that while in some cases marked relief follows treatment of the intra-nasal condition, in others, perhaps the majority, no such effect is observed. But the more we examine the arguments advanced on both sides the greater is the astonishment one feels at the lack of anything approaching unanimity of opinion. Some authorities insist that it is always worth while attempting to cure gross lesions of the nasal passages in the hope of thereby curing the asthma, while others are equally convinced that these coarse lesions are never productive of respiratory embarrassment. To crown the edifice of contradiction, Dr. Francis, of Brisbane, read a paper, which we publish in abstract in the proceedings of the Clinical Society, in which he states that out of 402 asthmatic patients presenting no apparent nasal lesion, eight only failed to obtain relief from cauterisation of the septum nasi. To emphasise the distinction Dr. Francis added that he was most sanguine of curing asthma when the patient presented no obvious intranasal mischief; in fact, when polypi were present he preferred to leave them untouched, directing his treatment only to the septum. Startling as are his results, they are perfectly reconcilable with physiological considerations. It is, indeed, highly probable that some part of the nasal apparatus has a controlling influence upon the respiratory centre; in other words, that it transmits the different impulses direct to that centre, thus standing sentry, as it were, over the respiratory function.

Carbonic Acid in Tuberculosis.

IN view of the doctrine that impure air is a powerful predisposing factor in regard to pulmonary tuberculosis, it is rather startling to be told that carbonic acid exerts a germicidal action on the bacillus. This conclusion is arrived at on the strength of observations which seem to explain the immunity towards the disease which obtains in certain physiological and pathological states on the ground of the comparative richness of the blood in the gas, such, for instance, as pregnancy, heart disease, &c,, while in certain other conditions, such as diabetes, the elimination of carbonic acid in the form of carbo-hydrates creates a proneness to tuberculosis.

It is asserted, moreover, that while venous blood is actively bactericidal in its action, arterial blood, rich in oxygen, constitutes a favourable culture medium. We are hardly in a position to discuss these data on their merits, but we may point out that the presence of carbonic acid in impure air does not prove this gas to be the only, or even the principal, agent in determining deterioration of health. We know as a matter of fact that the damage is done mostly by other organic impurities and emanations. A proportion of carbonic acid which, when associated with organic impurity, is highly detrimental to health, has been shown to be innocuous when separated therefrom. Carbonic acid is taken as a measure of aerial impurity, on account of the facility with which it can be estimated, just as the compounds of nitrogen, though themselves devoid of injurious action, are accepted as the measure of organic contamination of water. If the hypothesis be correct we are invited to accept the conclusion that the rational treatment of phthisis is the injection of a substance rich in carbon, such as pure petroleum; but we prefer to postpone a decision until more ample clinical data are forthcoming.

The Multiplication of the Fittest.

STATISTICAL pessimists profess the greatest concern lest the general intellectual standard of the nation should undergo deterioration in consequence of the indisposition of the more gifted members of the community to marry, and sundry depressing conclusions have been formulated on this somewhat flimsy superstructure. As a matter of fact, statistics do not bear out the premises. An American contemporary has been to the trouble of collecting statistics on this point, according to which the people comprised in the "Who's Who" of the United States marry not only as commonly but as early as the rank and file of the community. Unfortunately, these figures do not cover the whole ground, and do not vitiate the arguments of the pessimists. We are, indeed, less interested in the marriage rate of our intellectual superiors than in their fertility, and this appears to be very low. It is an observation common to all countries that the birth-rate among the higher classes is markedly below that which obtains in the lower social strata, though this does not imply so much a depreciation of virility as an excess of foresight and prudence. It really looks as if Nature had at heart to prevent undue cerebral development by keeping down the standard either by reducing the virility of the intellectual or by endowing them with a prudence which restricts reproduction. We might point out that it is not only highly intellectual people who are thus afflicted. A higher standard of material wealth seems to have much the same effect. In France, for instance, the desire to restrict the benefits of the family estate to one or two children has far more to answer for in this direction than the predominance of cerebral activity.

The Action of Salicylic Medication on the Urinary Tract.

THE renal troubles which occasionally follow the administration of salicylic acid and its derivatives are usually attributed to idiosyncrasy on the part of the patient, but Dr. Lüthe, of Grelfswald, asserts that in every instance more or less mischief is caused to the renal structures by the elimination of the acid. His attention was directed to the subject by observing that a notable proportion of patients taking salicylate of soda developed more or less marked albuminuria, which disappeared on the treatment being suspended. Thereupon he carried out a series of observations on thirty-three rheumatic patients who were taking from forty to eighty grains of the salicylate in the twenty-four hours. In every instance analysis of the urine revealed disturbance of the urinary function, sometimes in the form of albuminuria, in others the presence of white cells and erythrocytes, and in all there was abundance of epithelium from all parts of the urinary tract together with granular or hyaline casts. Crystals of oxalate of lime were also frequently present. The disturbance was in direct proportion to the dose of the drug, amounting, when large doses were given, to actual nephritis, which persisted for some time after the cessation of the drug. Cystoscopic examination of the bladder revealed marked irritation of the vesical mucosa and ureters. The conclusion is arrived at that the use of the salicylates ought to be restricted to acute cases, and that in no case should the daily dose exceed from sixty to seventy grains or be continued for more than four consecutive days.

The Recent Elections to the Pharmaceutical Council, Ireland.

THE recent elections to the Council of the Irish Pharmaceutical Society have resulted in the defeat of the Vice-President of the Society—Mr. J. I. Bernard. This occurrence is all the more noteworthy in that in the ordinary course of things Mr. Bernard would have been President for the ensuing year. It was the direct outcome of an attack upon Mr. Bernard by certain members of the Society, who apparently alleged that he had "identified himself with the common enemy of our profession," that is, with company pharmacists. We cannot enter into the policy of the Pharmaceutical Society regarding company-pharmacy. It is sufficient to say that the law has recognised such a pharmacy, and that unless the Pharmaceutical Society is prepared to go to Parliament to obtain an alteration in the law, it will have to recognise it too. We, however, find it very difficult to believe that Mr. Bernard has acted, or was likely to act, in a manner prejudicial to the best interests of the Society, and accordingly do not think that those members who opposed him have acted wisely. Mr. Bernard was, however, unfortunate in one of his supporters, who took advantage of the *contretemps* to introduce various side issues. Mr. McWalter, the member in question, further threatened to bring the conduct of the Society before the National League if it did not mend its ways. Mr. McWalter may have grievances, and if, as he alleges, it is true that religious distinctions are allowed to influence elections, he has detected a grievance. He can hardly, however, contemplate seeking election to the Council himself, or he would not have shown his hand quite so distinctly.

The Traffic in Old Horses.

The position of the United Kingdom with regard to the use of horseflesh for human food is anomalous and unsatisfactory. It is an open secret that a large amount of horse beef is consumed in London and other large towns, and there is good reason to suppose that a considerable quantity is palmed off on the poorer classes of the community as genuine ox beef. As regards the nutritive qualities and wholesomeness of the flesh of the horse no one can candidly assert that it is inferior to that of other animals habitually used for the food of man in this country. In other words, we refrain from eating horses from reasons that are purely sentimental, that is to say, from simple, sheer prejudice. The man who eats pork and refuses horseflesh would find it hard indeed to furnish any satisfactory explanation of the faith that in him lies. Anyway, it is well known that a considerable proportion of our worn-out horses are sent over to the Continent, where they are boiled down and return to us in the shape of meat extracts. There is no law to prevent either the export of the old horses or the importation of the extract. For all that, our magistrates appear to adopt the most illogical attitude with regard to the practice. They cannot stop this particular export traffic, but they punish heavily for cruelty to animals all persons found taking horses to the knacker's who are known to trade with the Continent. A week ago, in a London police-court, a man was sentenced to a month's imprisonment for sending a lame horse to an exporting knacker's to be killed. If the export trade be not illegal it is not easy to see the justice of vicarious punishment of that kind.

Building Acts and Fire Protection.

The Coroner's inquiry into the recent fatal fire in the City of London appears to be already bearing fruit. One of the points emphasised by the jury was the imperfection of the Building Acts as to the enforcement of proper provision for escape in case of fire. The Act is not retrospective, so that, as the greater proportion of the buildings in the City were built before the passage of the measure, they escape its provisions. The result is that workmen in factories built before 1875 have no such special protection. Then, again, no fire exits can be enforced when a building is sixty feet in height, a restriction which is, on the face of it, indefensible. Under the Factory Acts no provision is made for fire protection if less than forty persons are engaged under one roof. Then, again, instead of making the Factory and Workshops Acts apply to all trades, warehouses, and retailing businesses, its scope is limited to certain manufacturing premises, which in many cases can be defined only after prolonged and costly litigation. As a matter of fact, in practice an immense number of workpeople have absolutely no protection whatever against fire in their place of occupation, owing to the shortcomings of the Act above mentioned. Profiting by the sharp tenor of the recent fire, the London County Council are pressing the Home Office for further legislation to amend the Building Acts, so as to secure control over all buildings; in other words, to make the Acts retrospective. With that additional power, and a reorganised and properly equipped fire brigade, the security of the citizens will be materially increased.

Medical Sauce and Medical Advertisement.

Our attention has been called to the peculiar circumstances under which a sauce is sold to the public under the title of "Dr. Hewitt's Digestive Sauce." The article in question is made by a firm in Farringdon Street, London, and on one side of the bottle is a label with testimonials from four medical men, whose names and addresses are printed in full. Two of these gentlemen, Dr. Gabe and Mr. Sterne Price, live in Mecklenburgh Square, and a third, Mr. W. P. Hollis, in Claremont Square, London. The fourth writes from Ennis, but the name given is not to be found in the Irish list, although there is a Mr. J. Davoren registered in a metropolitan suburb. If the testimonials in question have been published without authorisation, as is doubtless the case, these gentlemen have just cause of complaint against the proprietors in thus thrusting greatness upon them, a greatness strictly comparable with the notoriety which is *not* fame. Some time ago a medical man's name and address was printed on a slip of paper, in connection with a testimonial, and put inside the cover of every tin of biscuits sold by an enterprising firm of manufacturers. Sauce and biscuits are about on a par in their connection with legitimate medicine, for we fear that the addition of the word "digestive" will not suffice to give the necessary professional stamp to the condiment in question.

Unfair Examination Questions.

Certain members of the State Board of Medical Examiners in California have been made the subject of rather violent criticism at the hands of a medical contemporary, on account of the questions which were asked at a recent examination. Our contemporary has no hesitation in openly hinting that the questions were such as could not be answered by any save the pupils of the examiner, inasmuch as the answers to them cannot be found in any standard medical work. Three questions particularly arouse his ire, and we must say that we have no hesitation in condemning them as unsuitable questions to be asked in a qualifying examination, though one hesitates to believe that they were asked with the deliberate intent of favouring certain students, as suggested

The three questions alluded to are "Define cryoscopy," "What is Hanot's disease of the liver," and "Define pollakiuria." Far too many examiners conceive it to be their duty to find out what a candidate does not know, and to entirely neglect any effort to find out what he does know. The former is a much easier process, and, perhaps, it is for that reason so generally adopted by unsuitable examiners. The Californian examiner may well be asked whether, even if candidates were able to answer these questions, they would *ipso facto* be better general practitioners than if they were unable to do so.

The Punjab and the Plague.

The greatest sanitary campaign which has ever been undertaken is that on which the Government of the Punjab have just entered. It is, in fact, the inoculation against plague of the total population, amounting to about ten millions. When one remembers the vigorous opposition shown elsewhere to protective measures by the natives of India, one cannot but wonder at the courage shown in deciding on such a scheme. But it seems no choice was left, for, to quote the Government Report, "there remains only inoculation." It is noteworthy that up to 1900 the Punjab was practically free from plague, while other parts of India were suffering tremendously. In the official year 1899-00 only 510 deaths from the disease occurred, but in the next year the number amounted to more than 6,000, while the last reports shows the huge total of 200,000. Such a rapid increase is unprecedented in the modern history even of this dread disease, and all measures dictated by science, experience, and policy have failed. The Government of the Punjab express the hope that the people will be induced to submit voluntarily to the operation of inoculation, and, presumably, in this expression they embody the opinion of advisers well qualified to judge.

The Early Diagnosis of Jaundice.

The recognition of a slight degree of jaundice is sometimes difficult when the observer has to trust for guidance entirely to the yellowish hue of conjunctiva and skin. Indeed, there can be no reasonable doubt that such cases not infrequently escape detection, together with many others in which no perceptible staining of skin and mucous membranes takes place. At the same time, it is obviously a matter of clinical importance to the physician to ascertain whether a patient has or has not free bile circulating in his blood. The urine often contains no bilirubin in the early stages of jaundice, even when that symptomatic condition is severe and strongly marked. Under these circumstances the method suggested by Dr. Hamel, Assistant of the Berlin Medical Clinic of the late Professor Gerhardt, promises to be of considerable practical value. In suspicious cases he advises an examination of the blood serum of the patient. He fills a small capillary tube with blood from a puncture in the lobe of the ear. After standing the tube, sealed at both ends, for a few hours in a vertical position the serum separates from the blood clot, and can be then examined against the light. Normal serum is colourless, whereas the slightest trace of bile is revealed by a yellowish tint varying in depth with the degree of saturation. This simple test should be useful in determining many obscure points in the action of bile-poisoning upon the human system, especially when the bile exists in minute quantities in the circulation.

Sleeping Sickness.

A severe epidemic of sleeping sickness, or negro-lethargy, has broken out in the Uganda Protectorate, and in the great Lake district of the Nyanza, Kioga, Baringo, Naivispha, and Nahurs fully one-third of the inhabitants are infected. Until 1898 the disease was unknown in the Protectorate. The first notice of sleeping sickness came from Winterbottom: "An Account of the Native Africans in the Neighbourhood of Sierra Leone, 1803." Forty years later Clarke published a series of articles on the subject, giving the classic clinical feature of the disease. The earlier noted cases were found on the low ground of the Bight of Benin and the coast line of Sierra Leone. It now appears that the disease was contracted in the higher grounds, and that its victims made for the sea-coast, just as to-day the negroes of Angola, when infected, make for the important commercial port of São Paulo de Assumpcão de Loando. Sporadic cases are found on the littoral of the Mediterranean Sea, and in the Island de Fernando Po, and in the Ihla da Principe; and a few cases have been reported from British Guiana and from the West Indian Islands. One case of the disease occurred in England, in a negro who was resident in the country for three years, a fact which gives some ground for the statement that the incubation of the disease not infrequently occupies seven years. Dr. Patrick Manson considers that no authentic case of the lethargy has been observed in a European. The lethargy from which Napoleon suffered from 1812 to his death had many of the clinical symptoms of the disease, notably his attack at Dresden. The disease was even more closely simulated in Dr. Foot's patient, who suffered from narcolepsy. The etiology of the disease is very obscure. During the old slave days, when gangs of the natives were driven to the West Coast for sale, nostalgia was credited with being the predisposing cause. Clarke thought that it was due to the excessive smoking of "diarrba," a variety of Indian hemp. The early missionaries looked on it as due to the excessive use of palm wine, a thing which would not account for its prevalence among the Marabouts, who drink nothing but water. It is now described as a meningo-encephalo-myelitis. This view was that of Clarke, who described his autopsies in which he found arachnitis, though Guérin, many years later, failed to find any evidence of such in twenty-three post-mortems. The Government has sent a Commissioner to the affected area to investigate the nature of the epidemic on the site of its greatest activity, and there is little doubt but that the work will result in a permanent and valuable addition to our knowledge of the disease.

Parents' Consent to Operations.

The question of obtaining the parents' consent to operations cropped up again at an inquest at Cardiff on a child who had died in the course of an operation for the relief of dropsy. The mother denied having given her consent, and the Coroner's suggestion that it would be well for surgeons to obtain a written authority before performing an operation an obviously impracticable plan. Moreover, if people place themselves in the hands of the medical officer of a hospital, it ought to be the presumption that they consent to undergo whatever treatment may be advised, otherwise their admission has no *raison d'être*.

Medical Students at Confinements.

At a recent inquest in London on a newly-born child the jury commented adversely on the practice of sending medical students to attend confinements, and despite the statement that it was one of the regulations of the colleges that students should attend such cases, and that such regulation was recognised by the General Medical Council, the jury added a rider to their verdict of natural death that in their opinion none but properly qualified men should be sent to such cases.

On Thursday, October 16th, Sir Victor Horsley is giving an Address before the Reading Pathological Society on "The Value of Anæsthesia as a Localising and Differential Symptom in Injury and Disease of the Central Nervous System."

Dr. Ernest W. White, Professor of Psychological Medicine at King's College, London, has been elected President of the British Medico-Psychological Association.

Dr. Goodhart will give an address at the special general meeting of the Bradford Medico-Chirurgical Society to be held to day (Wednesday), taking for his title "Round About Constipation."

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

LIVERPOOL.

[from our own correspondent.]

University College, Liverpool — Opening of Winter Session.—The winter session of the medical faculty of Liverpool University College was opened on Friday last, when the distribution of scholarships, medals, and prizes took place before a distinguished audience in the Philharmonic Hall. The occasion was more than usually interesting by reason of the presence of Sir Frederick Treves, Bart. Every part of the spacious hall was well filled. The governing body and teaching staff of the College, accompanied by former students of the medical faculty and by representatives of the staffs of various hospitals, entered the hall in processional order, and took up their places on the platform, headed by the stewards. In this picturesque academic pageant was displayed a bewildering variety of stately and richly-hued gowns, caps, and hoods representing the various universities at which their wearers had graduated. To the music of Mendelssohn's "War March of the Priests" in "Athalie," a singularly appropriate strain for this martial array of scholars clad in the impressive panoply of learning, they moved with the rustling of many gowns to their places. Considerable ridicule has been ignorantly thrown upon mere clothes by a late surgical writer of fame, but the display of Friday last will for ever take away the point from his shafts, cast, as we have said, in his ignorance. Sir Frederick took for his theme "The New Religio Medici," an address which we have the pleasure of reproducing on page 399. After the address, which was listened to with great interest, the Lord Mayor, in proposing a vote of thanks to Sir Frederick, expressed himself as reassured, and Dr. Carter, who occupied the chair, and who seconded the proposition, gave expression to the thankfulness he himself and the faculty felt to the lecturer for the kind and admirable advice given.

"**Fortiter, Fideliter, Feliciter.**"—Much inspiration flows from a wise motto. On reading the address by Sir Frederick Treves, it will be seen that he had been advising the students here to keep their eyes on the above three injunctions when discussing and comparing the old and the new conceptions of disease. But whether we view disease as a malignant entity, evil in origin, evil in intent, and evil in effect, or treat its manifestations as expressions of a natural effort towards cure, suffering and dying patients and weary and discouraged practitioners may well combine something of the stoic and sentimentalist, and gather hope, faith, and charity even from a motto.

BELFAST.

[from our own correspondent.]

Chair on Natural History in Queen's College.—The Chair of Natural History in Queen's College, rendered vacant by the resignation of Dr. R. O. Cunningham a few months ago, has been filled by the appointment of Mr. Gregg Wilson, M.A., Ph.D., D.Sc. Professor Gregg Wilson is a native of Falkirk, was educated at Edinburgh, at Freiburg, was assistant to Professor Cossar Ewart, and lately Inspector of Fisheries for England. He comes to Belfast with, according to the *Scotsman*, the reputation of being a delightful colleague, an enthusiastic worker, and an earnest and successful teacher. Should he see fit in his leisure time to interest himself in the fisheries of Ireland he may prove an acquisition not only to Queen's College but to the whole country.

Royal Victoria Hospital.—The winter session at the Royal Victoria Hospital will open on Tuesday, 21st. This will, in all probability, be the last session in the old hospital, as the new building is rapidly approaching completion, and is expected to be ready for occupation in the spring.

Special Article.

NATIVE MEDICINE IN CENTRAL AFRICA.

The people who occupy the western margin of the broad expanse of the Victoria Nyanza, and the adjoining portion of the tropical area of the Dark Continent, are known by the name of Baganda. Territorially, the Baganda are likely to prove of importance in the future progress of British civilisation in Africa. Ethnologically, they are negroids. Philologically, they are of the Bantu family. Physically, they are a fine race: many of the men stand over six feet in height. Æsthetically, they are graceful, both in figure and movement. Intellectually, they are both willing to learn and quick in the acquisition of knowledge. By intermarriage with women of neighbouring tribes they have greatly improved the general type. Specimens of the heavy, unintellectual negro are much more rare among them than among most other Central African tribes. Those untutored people of the equatorial section of mysterious Africa have, as would naturally be anticipated, many peculiar notions of their own in connection with disease and dissolution. To their primitive comprehension there is no such thing as "natural death." Both sickness and death are, in every instance, the result of the influence of some unfriendly spirit. The afflicted individual may by his own action have evoked the hostility of such spirit; or the malicious activity of the latter may be called into play by some evil-minded acquaintance who bears him a grudge. Their system of prognosis, as well as that of their treatment, is, as might have been expected, one which involves peculiarly complicated details. We owe to the Rev. J. Roscoe, C.M.S., Uganda, special thanks for the interesting information which he has given us on these heads. Whenever a case of sickness occurs the relatives of the patient proceed to ascertain the cause. For this very essential information they apply to the priest or medicine man, who in turn resorts to one of three oracles. He brings out a strip of cow's hide 4 ft. long and 18 ins. wide, which he spreads flat on the ground. He stands at one end, while the suppliant kneels at the other. He has also by him nine pieces of cow (or buffalo) hide, each 4 ins. long by 2½ ins. wide; one of these has a number of cowrie shells stitched on, while the other eight are plain. He has also a stick of 2 ft. in length, with (a natural) crook at the end; with which he hooks his cowrie shells, and draws them towards him after he has thrown them on the leathern slip. When everything is ready for the opening of the performance, the suppliant pays down nine cowrie shells —*nine* is the sacred number in Uganda. He then states the case for which he requires the assistance of his wise and holy adviser. The latter then takes up the cowries in one hand, and throws them on the leather—carefully noting how they fall. He repeats this action several times, rehearsing the principal symptoms of the case in question. When he has satisfied himself, he takes up his hooked stick; and, addressing himself to the suppliant, asks if the case is thus—proceeding to recapitulate the symptoms. By handing the suppliant the stick, he has put the latter on his honour to give a true and faithful account of the case. The clerical medicine-man then once more goes through the process of casting the cowrie shells, preparatory to the delivery of his final decision. Sometimes the suppliant is sent to another medicine-man, because the particular spirit who has wrought the mischief is one over which the first has no control. In the less difficult cases, the latter prescribes herbal remedies, to be applied either externally or internally.

In case of the mighty and wealthy members of his *clientele*, the sick person is first asked for a specimen of his saliva. This is received on a strip of plaintain leaf. Some animal—a fowl, a goat, or cow—is then forced to swallow it. The medicine-man then opens the body of the animal by a vertical incision, from the mouth to the stomach. The viscera are all carefully examined; every mark and spot is noted and counted. If the total number of these recorded is odd, the patient will recover; if even, he will die. The existence of but a single notable macula or pimple is of excellent augury: it presages long life and good health. A portion of the viscus, which is marked by a notable spot, is cut out, dried, stitched in a tiny leather bag, and worn by the person round the neck—as an amulet—to ward off physical evil for the remainder of life.

There is also a *water test*. The medicine-man brings a pot of water, into which the sick person is made to expectorate. Some dust formed of dried and powdered herbs is then thrown on the surface of the water, and the medicine man proceeds to roll the pot from side to side. If the floating layer of dust breaks up into an odd number of parts, the omen is favourable; if into an even number, the forecast is gloomy. When the prognosis has thus been given, the case is prescribed for. Herbs are very generally employed. Sometimes a special procedure to appease some spirit, or to secure the services of such agent, will be found necessary.

Throughout the various parts of the territory the local deities have huts for their residence; these also accommodate their officiating priests. Every native keeps one or more small huts near his house, where the spirits of his deceased relatives reside. If a suppliant is sent for aid to one of the gods, he must always bring an appropriate offering, according to his means. The wealthy man brings a cow; the less so, a goat, a fowl, a goat-skin, a feather—in descending scale. But no candidate can present himself without some bark-cloth and beer. A healing remedy of proportionate value is then prescribed. If the suppliant is sent to the hut of one of the spirits of his kindred, he kneels by the door and addresses the spirit inside; he recounts the troubles which brought him there; then promises a present proportioned to the rank of the spirit, and proceeds to implore its assistance in counteracting the influence of the hostile spirit who has effected the evil in question. He pours some beer on the doorstep and says: "I have stated my case. I will give you a present (here he mentions what he means to give); now let him who overcomes drink." The animal, a fowl dedicated to the deity, is turned loose by the hut, and is retained there as the property of the resident spirit. It is replaced in case of death. When the offering consists of skins or feathers they are tied to the door-post; if of a bark-cloth, it is placed within the hut. This latter is, however, carried off to clothe the sick person for a time, who thus receives the salutary influence of the spirit.

Sometimes it is found necessary, after failure of the efforts of the first medicine-man consulted, to have recourse to the good offices of a priest of a higher order. In such cases the special priest-medicine-man of the god has to consult the deity alone. He accordingly enters the hut and tells the divine tenant who the suppliant is, and what business has brought him. He does this by kneeling by the reed-wall which separates the spirit-room from the rest of the house, and speaking through this partition to the divine resident inside. At the conclusion of this preliminary performance, he goes out and brings in the suppliant; and they then kneel together before the wall, while the latter gives his own version of the trouble in question. When this has been done the priest takes a pipe of tobacco and "smokes it fiercely." This works him into a state of ecstasy, in which he loses his identity; he speaks in loud and excited tones, and these are easily recognised as the voice of the god speaking through the person of his agent. The deity, so incarnated, explains to the suppliant both the cause of the illness in question and the appropriate remedy. When this divine revelation has been completed, the medicine-priest retires to the rear of the hut; the deity then leaves him, he regains his individual personality, and may go about as before. The same priest of the deity may not always be eligible as the medium; a particular one has to be selected in some cases. In certain instances, a deity has but one priest to whom he reveals; the latter then always resides in the hut. But those special cases which require troublesome and complicated divine consultation usually occur only in female patients. In the case of males, it is generally sufficient for the priest-medicine-man to go in person to the patient's house after the preliminary investigation first described. When he arrives at the house of the sick man, the patient is carried out into the open; the medicine-man kills a cow or goat provided for the purpose, and catches the blood in a vessel. With some of this he sprinkles each door-post. He then takes a stout stick of three feet in length, fastens a bunch of grass to each end, places it across the door-way, and sprinkles it with the blood. The patient is then anointed with some of the blood —on the forehead, on either shoulder, and on either leg— just below the knee. He is then set on his feet, with a bark cloth around his shoulders; told to run as fast as he can, and jump over the stick in the door-way—allowing the bark cloth to fall off him as he does so—and make for his bed as fast as he can. During this performance he must by no means look round, but keep his eyes fixed on his bed—which he must make for as fast as possible.

Another method of treatment consists in taking the sick man into the garden, where the medicine man then cuts down a plantain tree. The trunk of the fallen tree is then slit, and the halves are separated widely enough to allow the sick man to pass between. It is then sprinkled with the blood of the sacrificed animal; the patient passes through, allowing his bark-cloth garment to drop off in doing so; and he makes for his bed, as before. The medicine-man then takes up the meat, the bark-cloth, and the cleft plantain stem, and goes in the opposite direction to that taken by the sick man. He throws the plantain on one of the main roads, and reserves the meat and the bark-cloth for his own private use. The very poor, who are unable even to supply even a fowl for the ceremony, are sprinkled on such occasions with a mixture of water and aloes.

A curious item of their clinical faith is, that the evil-disposed spirit which causes sickness without the special intervention of any living person, is usually believed to be the aunt of the patient—on the male side. Some of these are exceedingly malignant, and are causing continual sickness in the native home. In such cases the medicine-man is obliged to capture and destroy the spirit. This important operation he performs by bringing to the hut a cow or buffalo horn, into which he puts a cowrie or snail shell with a plantain seed. He attaches this to the end of a long stick, and passes it upwards along the central pole of the hut till it nearly reaches the roof. It is in this region that the spirit always resides. He then works the stick, with attached horn, about, till the contained shells and seed make a special squeaking noise; this is the *voice of the spirit*, which has got into the horn. The operator then rapidly lowers the latter, covers it with a piece of bark cloth, plunges it into a pot of water, and carries it off to the next river, where he submerges it. If a river is not available, he carries the pot, with its mouth well secured, to some unreclaimed grass land, where he leaves it to be destroyed by the next "prairie fire."

Baganda women are sometimes possessed by troublesome spirits; the principal symptoms are abdominal pains and swellings. The remedy is to have the patient inhale the smoke of certain herbs, burning upon hot embers. The smoke is, of course, of a quality which the spirit cannot tolerate. The latter accordingly flies to a less odoriferous locality. This, after all, displays a therapeutic cousinship to the burnt feathers and assafœtida treatment of "fits of the mother" in the Western regions of Europe.

Literature.

MOOR ON SUGGESTED STANDARDS OF PURITY FOR FOODS AND DRUGS. (a)

The desirability of adopting some more stringent and well-founded standards or limits of purity for drugs as well as for many food products, has occupied the attention of pharmacists and many others for some time past. Up to the present we are not aware of any work which deals in the manner of the present volume with the solution of this important problem.

The British Pharmacopœia and its commentaries, such as Squire's well-known "Companion to the British Pharmacopœia" and others, have in part succeeded in laying down more or less minute directions as to the preparation, dosage, and tests of purity of many of the more important drugs. The question as to which drugs should or should not be recognised officially the British Pharmacopœia has already prominently dealt with. But it is, we think, generally admitted that much yet remains to be done before we can claim to have anything like a perfect system of standards for drugs. To accomplish this satisfactorily requires the collaboration of those having special knowledge of both raw and manufactured drugs with analysts who have made these their special object of study.

It is to be feared that too often little attention is given by medical men to the actual potential strength of the preparations, be they food or drug which they prescribe; and frequently this is so because as yet, no satisfactory method of assay or standard of quality for the particular preparation exists. The importance of this and its bearing upon the interests of the general public is, doubtless, frequently best appreciated by medical men themselves.

Whilst, in the British Pharmacopœia we have, in most cases, very exact statements of the quantities of the various ingredients to be used in making certain preparations, and the total volume or weight of the resulting product; in the case of the raw drugs so employed it is often found that although very correct botanical description and other characters are stated, no allowance has been made for the variations in quality or content in active constituent which the latter, it would appear from the work before us, may and often do exhibit. A study of some of the results of analyses of commercial samples of drugs furnished by Mr. Moor in collaboration with several other workers in the present useful collection, makes it very clear that considerable variation is to be found in the composition of a large number of those drugs in common use, either in the amount of their most active constituent or in some other valuable quality. Such being the case, the need for more definite limitation as to their purity is, we think, obvious. To insist upon rigid standards in the case of some drugs is, we are aware, at present not practicable, owing mainly to the want of sufficient data upon which to go. This again is in part due, no doubt, to the fact that up to the present no satisfactory method for their assay is known. We believe, however, that the present very useful work will go far to remedy this state of things and towards making possible the adoption of many more correct and rational standards than at present exist.

Whilst, in the case of some of the drugs instanced, it would, we think, have been of advantage to have had further collateral data regarding them, with some information as to their origin, physical characters, &c., much credit is due to the author, Mr. C. G. Moor, for the vast amount of trustworthy data, largely representing his own personal work, which he has now brought together. We trust that the effort which he and his co-workers have made to deal with this important subject will receive the support and co-operation of others engaged in pharmaceutical research to whom the many references to other papers, &c., should be found most valuable.

This work is peculiarly well suited to the needs of town clerks, medical officers, and others who are called upon to decide whether in any particular case proceedings under the Foods and Drugs Acts ought to be instituted against vendors of foods and drugs; there is, in fact, no other work with which we are familiar giving such clear and accurate statements of the proper constitution of the various preparations of food and medicine. It is to be hoped, too, that an additional stimulus will be given to the makers of galenical preparations, wholesale druggists, and others to adopt, with the dawning progressive instincts of the present time, a more thoroughly systematic and scientific control over the raw and finished products which they turn out.

CANCER RESEARCH. (a)

Although Middlesex Hospital has since 1792 devoted particular attention to the care of patients the subject of malignant disease, it is only of recent years that the authorities seem to have been touched by that scientific spirit which is the characteristic of modern times, and which restlessly seeks to probe matters to the bottom. The awakened interest, both professional and popular, has at last aroused the "cancer charity of the Middlesex Hospital," to provide ways and means for a serious investigation of the problems which encircle the question of "cancer." This volume is the first record of the work accomplished under this new *régime*. We are given to understand that the original intention with regard to the issue of reports from the cancer research laboratories was that one volume should be published in connection with the completion of each series of 500 cases of malignant disease investigated. It is unfortunate that this excellent plan has been departed from so early, for the present volume is peculiarly silent as to details of the actual work accomplished in connection with the investigations of the cancer cases.

(a) "Suggested Standards of Purity for Foods and Drugs." By C. G. Moor, M.A., F.I.C., F.C.S. London: Baillière Tindall, and Cox. 1902. Price 7s. 6d.

(a) "Reports from the Cancer Research Laboratories: The Middlesex Hospital." Vol I. Edited for the Cancer Investigation Committee, by Alexander G. R. Foulerton, F.R.C.S. Pp. 204 with 8 plates. London: Macmillan and Co. 1902.

The chief feature of the volume is a most readable account by Dr. Sidney Coupland of the "cancer charity" connected with the hospital, and covers the period 1792 to 1902. Dr. W. P. Young furnishes an interesting study of the pathogenic action of blastomycetes; Dr. Cecil Price-Jones deals with the cytology of the blood in malignant disease; Mr. W. T. Hillier furnishes somewhat scanty statistics relating to 500 cases under treatment: and Dr. Foulerton and Dr. Cecil Price-Jones have a note on the bacteriological examination of cases of carcinoma and sarcoma.

As far as it goes the work is of value, but it does not appreciably advance our knowledge of the subjects treated.

HÆMOGLOBIN SCALE. (*a*)

Tallquist's "Hæmoglobin Scala" has gained considerable popularity in the land of its birth, and also in America, and Messrs. Down Brothers have been well advised in making it available for workers in this country.

It consists of a scale, marked so as to indicate the percentage amount of hæmoglobin in a sample of blood compared with it. Its ease of application should serve to make it useful for clinical purposes.

A large number of portions of absorbent paper, capable of being readily detached, are also provided. The drop of blood is allowed to soak into the absorbent paper, and as soon as the blood stain has lost its humid gloss it is pressed against a pad of filter paper and compared with the scale in good direct daylight. The *modus operandi* is thus of the simplest, and merely consists in the comparison of a spot of blood absorbed by the blotting-paper with the graduated scale of tints. The percentage, as already indicated, is marked against each shade of colour. The results are sufficiently accurate to afford a useful means of record in clinical work.

THE YELLOW FEVER EXPEDITION. (*b*)

The Liverpool School of Tropical Medicine, although young in years, has won a distinguished place among those institutions which have wrought strenuously and with well-directed energy for the up-building of the Empire and the welfare of the race. The present work is the seventh in a valuable series of memoirs dealing with the pathology of tropical diseases. There is a pathetic interest about the volume before us, for in the work of which it is the record Walter Myers laid down his life, a sacrifice to the study of the fell disease he was seeking to combat.

Dr. Durham has furnished us with a very complete and in many ways valuable account of the work of "the yellow fever expedition." Although the results can scarcely be held to be conclusive they go to show that in all probability yellow fever is due to a small and fine bacillus, and that mosquitos play a part in the transference of the disease.

The volume is a detailed record of much painstaking and dangerous work, and throws considerable light on a particularly perplexing and difficult subject.

NEW BOOKS AND NEW EDITIONS.

The following books have been received since the publication of our last monthly list:—

Baillière, Tindall and Cox (London, Dublin and Paris).

Manual of Surgery (University Series). By William Rose, M.B., F.R.C.S., Professor of Surgery in King's College, and Albert Carless, M.S., F.R.C.S. Fifth Edition, revised. Price 21s.

Suggested Standards of Purity for Food and Drugs. By C. G. Moor, M.A.Cantab., F.I.C. Pp. 258. Price 7s. 6d.

Text-Book of Diseases of the Ear and Adjacent Organs. By Adam Politzer, M.D., Docent Professor of Otology in the University of Vienna. Fourth Edition. Translated under the Author s supervision by Drs. Ballin and Heller. Pp. 824. Price 25s.

Le Sang, Physiologie Générale, par Marcel Labbé, M.D. Pp. 96. Price 1s. 6d.

Ambulance Organisation of an English Army Corps in the Field. By Major C. J. Addison. Second Edition. Pp. 16. Price 1s. net.

Charles Carrington (Paris).

The Plague of Lust. By Dr. Julius Rosenbaum. Two vols. Pp. 539 Price 42s.

Cassell and Co. (London).

A Manual of Medical Treatment or Clinical Therapeutics. New and revised Edition in two vols. Price 21s.

J. & A. Churchill (London).

Diet and Food. By Alexander Haig, M.A., M.D.Oxon., F.R.C.P. Fourth Edition. Pp. 127. Price 2s.

Heath's Practical Anatomy: a Manual of Dissections. Edited by J. Ernest Lane, F.R.C.S. Ninth Edition. Pp. 696. Price 12s. 6d.

Manual of Hygiene. By W. H. Hamer, M.A., M.D., &c. Pp. 622. With 93 Illustrations. Price 12s. 6d. net.

The Blood: How to Examine and Diagnose its Diseases. By Alfred C. Coles, M.D. Second Edition, with 6 coloured plates. Pp. 286. Price 10s. 6d.

Caries of the Spine. By Heather Bigg, F.R.C.S.Ed. Pp. 82. Price 2s. 6d.

A Treatise on Anatomy. By various authors. Edited by Henry Morris, M.A., M.B.Lond. Third Edition, revised. Pp. 328, with 846 illustrations, plain and coloured. Price 36s.

Wm. Clowes and Sons, Ltd. (London).

Transactions of the British Congress on Tuberculosis for the Prevention of Consumption. Vols. I., II., III., and IV. (Official).

Henry Kimpton (London).

The Science and Art of Prescribing. By E. H. Colbeck, B.A., M.D.Cantab., &c., and Arnold Chaplin, B.A., M.D.Cantab., &c. Pp. 185. Price 5s. net.

H. K. Lewis (London)

Ligaments: their Nature and Morphology. By J. Bland-Sutton. Third Edition. Pp. 112 Price 4s. 6d.

The Etiology of Typhoid Fever and its Prevention. By W. H. Corfield, M.D.Oxon., F.R.C.P. (Milroy Lectures.) Pp. 175. Price 2s. 6d.

Hygiene and Public Health. By Louis Parkes, M.D., D.P.H. and Kenry Henwood, M.B., D.P.H. Second Edition. Pp. 775. Price 12s.

J. B. Lippincott and Co. (Philadelphia and London).

International Clinics. Vol. II. Edited by Hy. W. Cattell, A.M. M.D., Philadelphia. Pp. 295.

Longmans, Green and Co. (London).

Elementary Biology. Descriptive and Experimental. By John Thornton, M.A. Pp. 270. Price 3s. 6d.

The Practitioner's Guide. By Walter Carr, M.D., F.R.C.P., T. Pickering Pick, F.R.C.S., Alban H. G. Doran, F.R.C.S., and Andrew Duncan, M.D., F.R.C.S., M.R.C.P. Pp. 1,107. Price 21s.

Macmillan and Co., Limited (London).

A Manual of Medicine. Edited by W. H. Allchin, M.D.Lond., F.R.C.S. Vol. IV.: Diseases of the Respiratory and Circulatory Systems. Pp. 493. Price 7s 6d.

New Sydenham Society. (Agent: H. K. Lewis, London.)

An Atlas of Illustrations of Clinical Medicine, Surgery, and Pathology. Compiled for the New Sydenham Society. (A Continuation of the "Atlas of Pathology.") Fasciculus XIV. (Double Number). Fasciculi I. and II. of New Series. Frambœsial Syphilis (Yaws and Parangi). With Descriptions by Jonathan Hutchinson, F.R.C.S., F.R.S., LL.D. and Sir William Kynsey, C.M.G., F.R.C.P.I. Plates A to H and LXXV.—XCI. Price to Non-members, £1 1s.

Rebman, Ltd.) London).

The Treatment of Tabetic Ataxia by Means of Systematic Exercise. By Dr. H. S. Frenhel. Pp. 185, with 132 illustrations. Price 12s. 6d. net.

Tuberculosis: as a Disease of the Masses, and how to Combat It. Prize Essay by S. A. Knopf, M.D. Pp. 76. Price 1s. net.

W. B. Saunders and Co. (Philadelphia and London).

Treatise on Diseases of the Skin. By Henry W. Stelwagon M.D., Ph.D. With 230 illustrations in the text, and 26 full-page plates. Pp. 1,115. Price 25s.

Atlas and Epitome of Abdominal Hernias. By Dr. George Sultan. Translated from the German. Edited by William B. Coley, M.D. Pp. 277. With 112 illustrations. Price 13s. net.

Mr. Joseph Whittaker, M R.C.S., of Salford, was the victim of a nasty fall about three weeks since, which resulted in injury to his arm and leg. He died somewhat suddenly last week. At the inquest it transpired that Mr. Whittaker was suffering from diabetes, and that the fall was due to his slipping over a badly-laid flagstone. A verdict was returned of "Death from diabetic coma, accelerated by the accident."

(*a*) "Hæmoglobin Scala." By T. W. Tallquist. Helsingfors: Wentzel Hagelstam's Förlag. English Agents: Down Brothers, 21, St. Thomas's Street London, S.E. Price 4s. 6d.

(*b*) "Report of the Yellow Fever Expedition to Para of the Liverpool School of Tropical Medicine and Medical Parasitology." By H. E. Durham. Pp. 79 with Illustrations and Plate. Published for the University Press of Liverpool by Longmans, Green and Co. 1902. Price 7s. 6d.

Medical News.

The Results of Vaccination in Porto Rico

The remarkable statistics relating to small-pox and vaccination in Porto Rico, which were brought to the notice of the American Association of Military Surgeons at Washington by Brigade-Surgeon Ames, furnish reading which will, we fear, prove unpleasant to the community of anti-vaccinationists. Briefly summarised, these statistics are as follows:—In October, 1898, small-pox was endemic in the island, in December it was epidemic, in January, 1899, it had "honeycombed" the island, in February there were over 3,000 recent cases, and the disease was rapidly spreading. During the last-mentioned month, systematic compulsory vaccination was adopted in all parts of the island, and by July 1st of the same year 860.000 vaccinations had been made in a population of 960,000. Of these 87·5 per cent. were successful. In the two and a half years which elapsed between that date and the writing of Brigade-Surgeon Ames' article the mortality from small-pox averaged two per annum, instead of the former average annual mortality of 621. "Can any *honest*, intelligent person doubt in face of these indisputable and easily verified facts what it was that in four short months drove small-pox from its wide and long-time reign on the island, and has since kept it out?" asks the writer of the article from which we quote. It will be interesting to know how the community to which we have alluded will answer this question, as it seems to us that unless they can state that the cause was not vaccination, the reason for their existence is gone. The anti-vaccinationist will however, doubtless at once see that Brigade-Surgeon Ames' question was not asked of him.

King's College (University of London).

The following scholarships and exhibitions have been awarded:—Clothworkers' Science Exhibition—A. G. Le Clercq, £40; S. Summerson, £30; W. T. Wheeler, £30. Sambrooke Medical Scholarships—H. L Gauntlett, £60; R. C. Paris, £40. Warneford Entrance Medical Scholarship—E. G. Gauntlett, £75. Engineering Entrance Exhibitions—A. P. Chalkley, £15; A. E. O'Dell, £15; F. C. Summerson, £10. Sambrooke Exhibition (Classics)—E. L. Wells (£50).

Death from a Fractured Skull.

Mr. Alfred Edward Odling, M.R.C.S., of East Lincolnshire, fractured his skull last week as the result of falling down the stairs at the Windmill Hotel at Alford, and he died two days later. At the inquest a verdict of accidental death was returned.

Death under Chloroform at Guy's.

An inquest was held at Guy's Hospital last week on the body of a man, aged 39, to whom chloroform was administered for the purpose of an operation for the relief of a tumour pressing on the trachea. Only one drachm of the anæsthetic had been administered. The chloroform was administered by the assistant house surgeon, Mr. Claude Tessier, who stated that he had given the drug in upwards of two hundred cases without a death. The percentage of deaths under chloroform was stated to be one in a thousand, which is vastly more than that usually retailed to the jury by coroners in such cases. The usual verdict was returned.—A similar mishap is reported from South Shields, where the managing director of a local theatre died under chloroform before the operation was even begun.

The Small-pox in Barbados.

Reuter's correspondent at Barbados reports that the spread of small-pox continues, notwithstanding the steps taken to check it. The Governor appointed public vaccinators, and free vaccination was given to the people. The latest returns handed in to the Quarantine Board show that some 20,000 persons have been vaccinated since the outbreak of small-pox. Every steamer brings a fresh supply of lymph, and it is hoped that with energetic vaccination the disease will be at least confined to the localities where it at present exists. The total number of cases up to Sept. 24th was 772, of which 103 have been discharged as cured, 27 have proved fatal, and 642 cases remain under treatment, including 26 patients taken into the hospitals that day.

University of Glasgow.

The following have passed the first professional examination for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subjects indicated (B., Botany; Z., Zoology; P., Physics; C., Chemistry):—

Wallace Wright Adamson (B., P.), Archibald Aitchison (B., P.), William Allan (B., Z.), Thomas M'Call Anderson (B., P.), John Atkinson (B., P.), Herbert Bertram (B., P.), Donald Price Bremner (B., C.), James Nimmo Brown, M.A. (B., P.), John Cameron (B.), William Rome Cammock (Z., C.), George Campbell (B., Z., P., C.), William Archibald Campbell (B., P.), John Paterson Carmichael (P.), Matthew Ignatius Thornton Cassidy (B., P.), Henry Howard Christie (B., P.), Alexander Beck Cluckie (B.), James Coutts (B, Z, P., C.), Thomas Lawson Craig (B., P.), Neilson Davie (B., P.), Alexander Dick (Z., P.), James Cowie Dick (Z., P.), John Alexander Doctor (B.), Robert Donald (P., C.), James Richan Drever, M.A. (B, C.), Richard John Driscoll (P.), James Dunbar (Z.), Alexander Wylie Eadie (B., P.), Ernest Milne Eaton (B., P), William Miller Fairlie (B., P.), Thomas Loudon Fleming (P., C.), George Fletcher (B, P.), George Muir Fraser (B., P.), James Wilfred Georgeson (C.), William Gilfillan (B., Z., P.), Robert Govan (B., P.), John Vincent Grant (P.), Thomas Purdie Grant (B., P.), Arnold Harris Gray (C.), James Dow Gray (B., P.), David Hamilton (B., P.), William Towers Hardie (B., C.), James Duncan Hart (B, P.), James Dunlop Kidd (C.), James Towers Kirkland (C.), George Ligertwood (P., C.), Angus Macaulay (P.), John M'Cartney (C.), James M'Donald (B), James M'Farlane (B., P.), Robert M'Inroy (Z., P., C.), John Henry M'Kay (B., P.), William Anderson M'Kellar (B., P.), Murdo Duncan MacKenzie (B., Z, P., C.), Thomas Cooper Mackenzie (B, P.), Alister Argyle Campbell M'Neill (B., P.), Charles James Colquhoun Macquarie (B., P.), Isa Carswell Marshall (B., P.), William Matheson (B., Z., P., C.), Robert May (B.), John Clark Middleton (B., P.), Allan Frederick Miller (B., Z., P.), John Wilson Miller (B.), William Miller (C.), Peter Mitchell, M.A. (C.), Robert Wright Mitchell (C.), Hugh Walker Moir (Z.), Hugh Morton (B), Patrick O'Brien (B., P.), Patrick Joseph O'Hare (C.), John Oswald (B.), James Hogg Paul (B., P.) Frederick Gordon Robertson (B., P.), James Henry Anderson Robertson (C.), Murdoch Mann Rodger (Z., P.), William James Rutherfurd (B.), William Wilkie Scott (B., Z.), John Sharp (B), Robert Wilfrid Simpson (C.), Alexander Hunter Sinclair (B., C.), William Smellie (B., Z., P., C.), James Anstruther Smith (B.), John Steedman, (B., P.), John Stevenson (B., P.), William Stevenson (Z.) John Stewart (B., P.), John Torrance Weir Stewart (P.), Matthew John Stewart, B, P.), John Anderson Struthers (B., P.), David Laurence Alexander Tate (P., C.), Robert Scott Taylor (B., P.), Robert Todd (Z.), Martin Turnbull (Z., C.), John Morris Walker, (B., P.), Hugh Watson (B., Z.), John Weir (B., P.), James Kennedy Welsh (B., P.), David John Williams (P., C.), George Haswell Wilson (B., P.), Samuel Wilson, M.A. (B., P.), William Mitchell Turner Wilson (Z), Moses Youdelevitz (B., Z., P., C.) Women—Jeannie Montgomery Andrew (B., Z), Martha Maclean Buchan (B., Z.), Agnes Picken (B., Z.), Jeanie Hinshaw Stewart (B., Z.).

The following have passed the second professional examination for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subjects indicated (A., Anatomy; P., Physiology; M., Materia Medica and Therapeutics):—

Andrew Blair Aitken (A., P., M.), William Smith Allan (P.), Andrew Woodroffe Anderson (P., M.), Henry Graeme Anderson (M.), John Bain (P., M.), Allan Robertson Barrowman (M.), Robert Daniels Bell, M.A. (M.); George Thomson Bogle (P.), Thomas Brodie (A.), Charles Brown (A), Thomas Murdoch Campbell, M.A. (P., M.), Robert Buchanan Carslaw, M.A. (M.), Thomas Goodall Copestake (M.), Charles Milligan Drew, M.A. (P.), Hugh Harvey Fulton (M.), William Harold

Gillatt (M.), William Macmillan Gilmour (A.), David Livingstone Graham (M.), John Graham (M.), George Munn Gray (M.), Louis Leisler Greig (M.), Saul Hyman Harris (P.), Alexander Robertson Forrest Hay (M.), James Waugh Hay (P.), John Cochrane Henderson (M.), Ralph Vincent Howell (P.), Alexander Hunter (P., M.), Archibald Yuill Hutchinson (A., P., M.), James Rutherford Kerr (A., P.), John Kerr (A.), William Jamieson Logie (M.), Peter Lowe, M.A., B.Sc. (P., M.): Thomas Symington Macaulay (M.), John Duncan M'Callum, M.A. (A., P., M.), Donald Carmichael M'Cormick (M.), Neil M'Dougall (A., P., M.), James Boston M'Ewan (M.), Tom Duncan M'Ewan (M.), Duncan Macfadyen (M.), John M'Farlane (M.), Robert Macfarlane (M.), James Denniston Macfie (P., M.), Alexander Stuart Murray Macgregor (A., P., M.), James M'Houl (M.), Charles Gordon Mackay (A., P., M.), David James M'Leish, M.A. (M.), Matthew Thompson Drummond M'Murrich (P., M.), Andrew Brown M'Pherson (A.), Richard Cameron Macpherson (P., M.), James Marshall, P., M.), William Blair Morton Martin (A., P.), John Moffatt (P., M.), John Muir (M.), Macdonald Munro (M.), John Murdoch, A., P., M.), Frank Anderson Murray (A., P.), George Clement Nielson (M.), Thomas Orr (A.), Howard Henderson Patrick (M.). John Pearson (A., P., M.), John Clegg Pickup (M.), Andrew Maclean Pollock (M.), James Porter (M.), William Murdoch Rae (P.), James Watson Richmond (P., M.), Berkeley Hope Robertson, M A. (M.), Robert Thin Craig Bobertson (A.), John Macdonald Ross (A., P.), William Hermann Sieger (P., M.). Robert Alexander Slater (P., M.), George Goldie Smith, B.Sc. (M.), Morrison Wood Smith (P., M.), William Robb Taylor (P.), William Templeton (M.), James White Thomson (M.), William Young Turner, M.A. (A., P, M.), Thomas Macknight Watt (M.), David Watson Wilson (A., P., M.), George Wilson (A.).

Women.—Bethia Shanks Alexander (P., M.), Annie Agnes Baird, M.A, (P.), Mary Theresa Gallagher (M), Jane Hamilton M'Ilroy, M.A., B.Sc. (M.), Florence Mann (M.), Margaret Walker Millar (P.), Harriet Rowland Louise Reid (P.), Jane Reid Shaw (M.), Lily Smellie (M.), Annie May Yates (M.).

The following have passed the third professional examination for the degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subjects indicated (P., Pathology; M., Medical Jurisprudence and Public Health):—

John William Arthur (P.), Thomas Ballantyne (P.), Andrew Farm Bell (P.), Thomas Bennett, M.A. (P.), William Thomas Bolton (P., M.), Robert George Bradford (P., M.), John Brown (P., M.), Carl Hamilton Browning (P., M.), Robert Bruce (P.), Daniel Lyall Carmichael (P.). Alexander Erskine Clark (P.), John Cross (P., M.), James Forsyth, (P., M.), James Glover (P., M.), William Harvey (M.), John Monnette Huey (P., M.), Alexander Jamieson (M.), Alexander Dingwall Kennedy (P.), Thomas Lovett (P., M.), Donald Macaulay (M.), John Finlay Macdonald (P., M.), Alexander Stewart M'Millan (P, M.), Andrew Alexander M'Whan (P., M.), John Baird Morton (P., M.), Alexander Harper Napier (P., M.), James Carmichael Pairman, M.A. (P., M.), David Penman (P.). George Richmond (P., M.), Peter Hamilton Robertson (M.), Lawrence Drew Shaw (P., M.), John Black Stevenson (M.), William Davidson Henderson Stevenson, M.A. (M.), John Allan Thom (P., M.), John Turnbull (M.), Joseph Walker, M.A. (M.), Robert Wallace (P., M.), Robert Watson (M.), Robert Tait Wells, M.A. (M.), George Henry Wildish (P., M), Hugh Young (P., M.), John Young (Glasgow) (P., M.), Watson Young (M.).

Women.—Jeanie Auld (P., M.), Agnes Wallace Cameron (P., M.), Jessie Galloway Duncan (P.), Jane Reid Foulds Gilmour (P., M.), Margaret Hardy (P., M.), Alice Wesley Maclean (P., M.), Martha Hunter Scott (P., M.), Janet Gardner Waddell (P., M.).

At the recent professional examinations for the Degrees of M.B., Ch.B., the following candidates passed with distinction in the subjects indicated:—

First examination—In Botany and Physics: John Stevenson, Matthew John Stewart. In Zoology and Physics: William Gilfillan. In Physics and Chemistry: Robert Donald. In Botany: Patrick O'Brien, John Steedman, Samuel Wilson, M.A. In Zoology: William Rome Cammock. In Physics: William Archibald Campbell, Matthew Ignatius Thornton Cassidy, Henry Howard Christie, Neilson Davie, Ernest Milne Eaton, George Fletcher, John Clark Middleton, Frederick Gordon Robertson, Robert Scott Taylor, John Morris Walker, John Weir, James Kennedy Welsh, George Haswell Wilson. In Chemistry: William Miller, Peter Mitchell, M.A.

Second Examination—In Anatomy, Physiology, and Materia Medica and Therapeutics: Andrew Blair Aitken. In Anatomy and Physiology: William Blair Morton Martin. In Anatomy: John Duncan M'Callum, M.A. In Physiology: Alexander Stuart Murray Macgregor. In Materia Medica and Therapeutics: Allan Robertson Barrowman, Robert Daniels Bell, M.A., Robert Buchanan Carslaw, M.A., George Munn Gray.

Third Examination—In Pathology and Medical Jurisprudence and Public Health: James Glover. In Pathology: Carl Hamilton Browning, John Baird Morton, Martha Hunter Scott.

The Royal University of Ireland.

The Examiners have recommended that the undermentioned candidates be adjudged to have passed the first examination in Medicine, Autumn, 1902:—J. A. Black, J. B. Butler, Gault Calwell, J. M. A. Costello, R. Cox, N. M. Donnelly, J. Dooley, P. Ferris, J. J. Flood, Jane McC. Fulton, W. S. Graham, C. E. L. Harding, C. R. Harvey, W. T. Henderson, J. J. Hickey, J. Kilgarriff, V. J. McAllister, P. T. McArdle, R. A. M. L. McCrea, J. J. O'Neill, W. Riddell, Maria Rowan, S. J. Watson.

The undermentioned candidates have qualified upon their answering for further examination for Honours in the subjects set after their names (B., Botany, C., Chemistry, P., Physics, Z., Zoology):—J. A. Black (Z., C., P.), J. B. Butler (B., Z., C, P.), Gault Calwell (C.), R. Cox (P.), N. M. Donnelly (Z., P.), C. E L. Harding (C.), C. R. Harvey (B., Z., C., P.), J. Kilgarriff (Z.), V. J. M'Allister (B., Z.), W. Riddell (P), Maria Rowan (B., P.)

University of Durham.

At the Convocation holden on Saturday, September 27th, 1902, the following degrees were conferred, viz.:—

Doctor in Medicine:—Christopher O. Bodman, M.B., B.S., Durh.; Philip Boobbyer, M.B., M.S., Durh.; Sidney H. Hawley, M.B., Durh.; Henry Smurthwaite, M.B., B.S., Durh.; Harold Robert D. Spitta, M.B., B.S., Durh.; Joseph B. Stephenson, M.B., B.S., Durh.; Sydney D. Turner, M.B., B.S., Durh.; John C. Velenski, M.B., B.S., Durh.

Doctor in Medicine for Practitioners of Fifteen Years' Standing:—George A. Edsell, M.R.C.S., L.R.C.P., L.S.A.; Ernest H. Ellison, M.A., M.R.C.S., L R.C.P., L.S.A.; George W. H. French, F.R.C.S.; John H. Gough, M.R.C.S., L.R.C P, F.R.C.S. E.; George F. A. Harris, M.R.C.S., M.R.C.P.; Hillyard W. Haydon, M R.C.S., L.R.C.P., L.S.A.; John Jones, M.R.C S., L.R C.P., L.S.A.; John E. London, M.R.C.S., L.R.C.P., L.S.A.: Alfred E. W. Ramsbottom, L.R.C.S.I., L.M.; William L. Symes, L.R.C.S., F.R.C.P. I., L.M.; Onslow A. Wickham, M.R.C.S., L.R.C.P., L.S.A.; Lionel H. Williams, M.R.C.S., L.S.A.

Bachelor in Medicine (M.B.):—Reginald Bigg, M.R.C.S., L.R.C.P., Anthony B. Bradford, Annie T. Brunyate, John Cooper, B.Sc., Ida Emilie Fox, James W. Gibson, George Mack, Leonard C. Newton, Monica L. Robertson, Thomas C. Rutherfoord, M.R C.S., L.R.C.P., Gayton W. Smith, M.R.C.S., L.R.C.P., Basil E. Spurgin, Charles R. Stewart, James B. Waters, Frederick G. Wilson, Robert Younger.

Bachelor in Surgery (B.S.):—Reginald Bigg, M.R.C S, L.R.C.P., Anthony B. Bradford, Annie T. Brunyate, John Cooper, B.Sc., Ida Emilie Fox, James W. Gibson, George Mack, Leonard C. Newton, Monica, L. M. Robertson, Thomas C. Rutherford, M.R.C.S., L.R.C.P., Gayton W. Smith, M.R.C.S., L.R.C.P., Basil E. Spurgin, Charles R. Stewart, James B. Waters, Frederick G. Wilson, Robert Younger.

Bachelor in Hygiene (B.Hy.):—Emmeline Da Cunha, L.M. and S. Degrees, Esther M. Stuart, M.B., C.M.

Notices to Correspondents, Short Letters, &c.

☞ **Correspondents** requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

Original Articles or Letters intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Dr. Raymond Davis is thanked for his communication.

Memo.—We fail to see that any advantage would accrue from a detailed discussion of the circumstances under which the unfortunate victim met with his death. We cannot at this stage go behind the verdict of the coroner's jury, which exonerated everybody concerned.

THE "FREEDOM" OF THE SOCIETY OF APOTHECARIES.

The Freedom of this Society carries with it, we believe, the Freedom of the City of London. In our advertising columns it will be seen that the Court propose this year to admit a number of Licentiates (not exceeding ten) to this privilege on payment of a fee of £28.

Ex-Forester.—Your explanation is a reason without being an excuse. We must decline any further correspondence on the subject.

A RECALCITRANT SUBJECT.

A well-known surgeon was imparting some clinical instruction to half-a-dozen students who accompanied him in his rounds. Pausing at the bedside of a doubtful case, he said, "Now, gentlemen, do you think this is, or is not, a case for operation?" One by one the students made their diagnosis, and all of them answered in the negative. "Well, gentlemen, you are all wrong," said the wielder of the free and flashing scalpel, "and I shall operate to-morrow." "No you won't," said the patient, as he rose in his bed. "Six to one is a good majority; gimme my clothes."

Treasurer.—The best plan is to pay the money into your bank in a separate account with an appropriate heading. This account might be arranged so that cheques thereon must be signed by your colleague as well as by yourself.

THE CASE OF DR. RAINSBURY.

To the Editor of The Medical Press and Circular.

Sir,—Referring to the appeal made by Dr. Rainsbury in discharging the judgment debt and costs in the above matter, I beg to enclose a further list of contributions; and on behalf of Dr. Rainsbury and the Council of the Midland Medical Union to thank those who have so generously responded to the appeal. I would add that there still remains a balance of £118 18s. 11d., towards which it is hoped that further contributions will be made.

I am, Sir, yours truly,
George S. O'Rorke, M.A.,
Secretary, Midland Medical Union.

By contributions already acknowledged	£55	12	3
Dr. C. H. Taylor, Charnwood House, Derby ...	1	1	0
Dr. W. A. Lee, Pilsley, near Chesterfield... ...	0	10	0
Dr. W. F. Brook, sen., Fareham, Hants	1	1	0
Dr. J. H. Booth, Church House, Chesterfield ...	0	10	0
Dr. W. T. Wood, Cresswell, near Mansfield ...	1	1	0
Dr. T. Corkery, Alfreton	1	1	0
Dr. J. Ingram, Cliffe House, Shirebrook	1	1	0
Dr. John Buckley, Hasland, near Chesterfield ...	0	10	0
	£62	7	0

Meetings of the Societies, &c.

Wednesday, October 15th.

Royal Microscopical Society (20, Hanover Square, W.).—8 p.m. Prof. Rev. T. G. Bonney: Demonstration on Rock Changes in Nature's Laboratory.

Thursday, October 16th.

Ophthalmological Society of the United Kingdom.—4.30 p.m. Mr. H. C. Baldwin: Dislocation of Eyeball through Palpebral Aperture, Reduction, Recovery.—Mr. E. Nettleship: (1) Birth Palsy of Sixth and Seventh Nerves on the Same Side; (2) Recovery of Perfect Vision in a Case of Family Optic Neuritis (Leber's Disease).—Mr. H. A. Lediard: Dermoid Cyst of Orbit causing Complete Dislocation of Eyeball.

Harveian Society of London (Stafford Rooms, Titchborne Street, Edgware Road, W.).—Clinical Evening. Cases will be shown by Dr. L. Guthrie, Dr. A. Morison, Mr. Watson Cheyne, Mr. E. Roughton, Mr. R. Johnson, Mr. F. Jaffrey, and others.

Friday, October 17th.

The Society for the Study of Disease in Children (11, Chandos Street, W.),—5.30 p.m. Clinical cases by Dr. W. Milner Burgess, Dr. Frank Deas, &c.

Monday, October 27th.

Odontological Society of Great Britain (20, Hanover Square W.).—Communication by Dr. J. W. Pare, and a Short Paper by Dr. Beddard and Dr. Spriggs, on Some Methods of Preparing Teeth for Histological Examination.

Appointments.

Beatty, J., M.D.Dubl., Medical Officer of Health for the Borough of Northampton.

Briggs, Walter, M.B., Ch.B.Vict., Junior House Surgeon to the Blackburn and East Lancashire Infirmary.

Brodrick, C. C., L.R.C.P., L.R.C.S.Edin., Medical Officer of Health to the Tavistock Rural District Council.

Brown, G. A., M.R.C.S., L.S.A., Medical Officer of Health to the Tredegar Urban District Council.

Bull, H. A., M.R.C.S., L.R.C.P., Medical Officer for the Colwick Division of the Stafford Union.

Flack, Frederick H., M.B., Ch.B.Vict., Senior House Surgeon to the Blackburn and East Lancashire Infirmary.

Forman, B. G., M.B., B.S.Edin., District Medical Officer for the Union of Scarborough.

Fullerton, Andrew, M.D., B.Ch., F.R.C.S.Irel., Honorary Assistant Surgeon to Royal Victoria Hospital, Belfast.

Harnett, Charles John, M.D.Lond., M.R.C.S., L.R.C.P.Lond., Surgeon and Agent to the Admiralty at Margate.

Hill, Abraham J., M.D.Lond., M.R.C.P., Honorary Physician to the Royal Infirmary, Liverpool.

Lyth, H. A., M.R.C.S., L.R.C.P., Assistant House Surgeon to the Rotherham Hospital and Dispensary.

Okell, George, jun., L.R.C.P.Irel., Certifying Surgeon under the Factory Act for the Winsford District of the County of Chester.

Potts, Lawrence, M.R.C.S., L.S.A., Medical Officer to the School for the Blind, Leatherhead.

Vacancies.

East London Hospital for Children and Dispensary for Women, Shadwell, E.—Pathologist and Registrar. An honorarium of £100 is attached to the post. Applications to Thomas Hayes, Secretary.

Grove Hall Asylum, Bow, London, E.—Assistant Medical Officer (male). Salary £150 a year, with board, furnished apartments, attendance and washing. Applications, personally if possible, to the Medical Superintendent.

Jenner Institute of Preventive Medicine.—Assistant Bacteriologist. Salary £200 per annum, with furnished rooms. Applications to the Secretary, Jenner Institute, Chelsea Gardens, S.W.

Lancaster County Lunatic Asylum.—Assistant Medical Officer. Salary £150 per annum, with board, &c. Applications to the Medical Superintendent.

Manchester Children's Hospital.—Lady Superintendent. Salary £100 per annum, with board, rooms, washing, and attendance. Applications to Secretary, Children's Dispensary.

Manchester Hospital for Consumption and Diseases of the Throat and Chest.—Resident Medical Officer. Salary £100 per annum, with board, apartments, washing, and railway contract to Manchester. Applications to C. W. Hunt, Secretary.

Metropolitan Asylums Board.—Male Assistant Medical Officer for duty at the Asylum at Darenth, Dartford, Kent. Salary £150 per annum, with rations, lodging, attendance, and washing. Applications to Office of the Board, Embankment, E.C.

Monmouthshire Asylum, Abergavenny.—Junior Assistant Medical Officer (Male). Salary £150 per annum, with board, lodging, and washing. Applications to the Medical Superintendent.

The Royal Infirmary, Sheffield.—House Surgeon. Salary £120 per annum, with board, lodging, and washing. Applications to George Henry Day, Secretary.

Wolverhampton and Staffordshire General Hospital.—House Physician. Salary £100 per annum, with board and lodging. Applications to Edmund Foster, House Governor and Secretary.

Woodilee Asylum, Lenzie.—Assistant Medical Officer. Salary £125 per annum, with board, lodging, and washing. Applications to Dr. Marr, Medical Superintendent.

Births.

Hancock.—On Oct. 10th, at Devonshire House, Gravesend, the wife of George C. Hancock, M.R.C.S., L.R.C.P., D.P.H.Lond., née Lenchars, of a daughter.

Melville.—On Oct. 9th, at Moville, Coonoor, Southern India, the wife of Major C. H. Melville, R.A.M.C., of a daughter.

Poole.—On Oct. 9th, at Hemplow, South Teddington, Hampton Wick, the wife of J. Copeland Poole, M.R.C.S., L.R.C.P., of a son.

Marriages.

Mackintosh—Parker.—On Oct. 8th, at St. George's Church, Dublin, Dr. M. Lovell Mackintosh, of Crowborough, Sussex, elder son of the late Dr. Mackintosh, of Crowborough, to Martha Donaldson, eldest daughter of J. D. Parker, Esq., of Castleconner, co. Kilkenny.

Sikes—Somerville.—On Oct. 4th, at Christiania, Alfred Walter Sikes, M.D.Lond., F.R.C.S., of 40, Argyll Road, W., second son of Richd. Cherry Sikes, Esq., Cork, to Mary Maitland, eldest daughter of Thos. Townshend Somerville, Esq., of Christiania.

Death.

Whiting.—On Oct. 3, at her residence, 47, Carson Road, West Dulwich, Surrey, Eliza Catherine Whiting, relict of the late James D. C. Whiting, M.R.C.S.Eng.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, OCTOBER 22, 1902. No. 17.

Original Communications.

UTERUS BICORNIS WITH RIGHT RUDIMENTARY HORN,

PERIODICAL DISTENSION OF THE RIGHT HORN WITH FLUID AND CONSEQUENT INFLAMMATION IN IT AND AROUND IT.—LATE MENSTRUAL PAIN.—OPERATION.—RECOVERY. (*a*)

By JOHN W. TAYLOR, M.Sc., F.R.C.S.,
Professor of Gynæcology, Birmingham University.

MISS M. B., æt. 17, was sent to me on October 28th, 1901, by Dr. Neal, of the Coventry Road, with the following note:—"I should be much obliged if you would give me your opinion concerning Miss B., and any hints for treatment. She has *very* severe pains after menstruation."

The patient was a well-developed, healthy-looking girl, complaining of very definite pain in the right side, which always came on about the fifth day after the onset of menstruation and lasted for a few days afterwards. This pain had been felt for nearly four years (from the date of the first menstruation), but had been latterly increasing in severity and becoming unbearable. The first menstruation occurred at thirteen years of age—since that time the patient had always been "regular." The period usually lasted four days. The discharge was slight in amount.

The following note was made of the examination:—"I find a large, hard tumour (presumably the right ovary) fixed to the right of the retroflexed fundus." "When I gently try if the uterus is replacable, this does not follow."

I came to the conclusion that both uterus and tumour were adherent in the pouch of Douglas; that the tumour was the cause of the right side pain, and that in all probability abdominal section would be necessary in order to deal with the condition.

Being loth, however, to submit so young a patient to operation unless absolutely necessary, I asked Dr. Neal to let me watch the patient for some weeks before deciding.

During this time the right-sided tumour very markedly decreased in size, showing that it was liable to considerable alteration in this respect. There was, however, no difference in the fixation of the pelvic contents, and but very little (if any) improvement in the pain after menstruation. As far as could be ascertained there was no tuberculous history, either in the patient or her family, and no history or danger of gonorrhœal infection.

On January 28th, 1902, exactly three months after the first consultation, I operated. I found a small muscular solid tumour, very adherent in the pelvic floor, to the right of the retroflexed and adherent uterus. Detaching this and the uterus from their adhesions I was able to bring the fundus forward and draw the tumour up to the incision for examination. It was then seen that the ovary was perfectly normal and with the tube was situated altogether on the outer side of the tumour. The question then arose whether this tumour could be a large myoma of the tube close to its uterine attachment, or a rudimentary horn. No trace of the round ligament could be found on the "uterine" side of the tumour, but beyond it, on the outer side, in close relation with the tube a ligamentary ridge was found curving forwards, which evidently represented the round ligament. The tumour was therefore decided to be formed by a right rudimentary horn. It is worthy of note, however, that in this case the uterus of the opposite (or left) side did not appear to suffer materially in size or shape by its separation. Except for the absence of the round ligament one would have said that its general appearance was that of a normal virginal uterus.

I removed the tumour of the right horn by a chain of ligatures without disturbing the other organs, so that nothing beyond it was taken away. The stump appeared to be solely one of muscle tissue, and no mucous canal was seen leading into or out of the tumour. On cutting into the tumour some dirty-looking watery fluid escaped from an apparently closed cavity in its centre lined with mucous membrane. There was no trace of blood within this cavity, which on the expulsion of the fluid immediately contracted.

At the close of the operation the pelvis was found to be perfectly clean, and the chain of ligatures held the uterus in "normal" anteversion.

The patient made a very easy and uneventful recovery. Her bowels were well opened on the following morning, and on February 12th she was discharged as convalescent. She attended to report herself on March 17th. She had passed her first menstrual period without pain, and was in good health and condition. Again on October 6th she attended at the out-patient department and reported that she had menstruated regularly without the slightest pain ever since the operation, and was perfectly well. The uterine horn removed was examined by Professor Leith, whose report is as follows:

Four pieces were selected and examined.

Piece I.—Taken from centre of body of (secondary) uterus. This shows a central cavity, lined by endometrium, with typical mucous membrane lining. It is surrounded by tissue, which is noticeably mapped out into definite muscular areas by bands of fibrous tissue.

Piece II.—Taken from tubal end (*a*) of semicircular incision line which ran from the Fallopian tube on the outer side to the uterine attachment on the inner side. This showed no sign of any cavity

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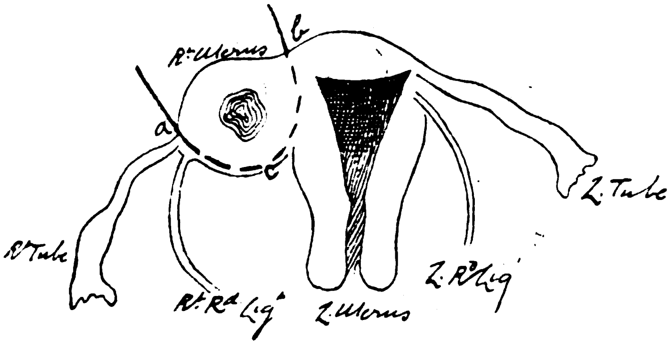
(*a*) Read before the British Gynæcological Society on October th, 1902.

merely a solid muscular tissue mapped out into areas as above. The blood vessels were well formed and numerous.



DIAGRAMMATIC REPRESENTATION OF CONDITION.

Piece III.—Taken from uterine end of the same incision *b*). This showed no sign of any cavity leading from mucous cavity of horn into structure representing other uterus. It showed merely muscular tissue as above, with many fibrous bands and areas in it.

Piece IV.—Taken from between the other two (*c*) showed the same characters as the other two, with relatively less muscular and more fibrous tissue.

Remarks.—The interest of this case appears to me to lie, not only in its rarity and in the peculiar isolation of the mucous cavity of the rudimentary horn, but also in the explanation which the condition affords of the peculiar symptoms of the patient. The patient's pain was a definite, right-sided pain, attaining its maximum on the fifth day after the onset of menstruation. I thought at the time of her first visit that this was an extraordinary symptom to be associated with ovarian tumour, or enlargement, any ovarian pain usually preceding the menstrual flow, but no other explanation of the adherent tumour to the right of the fundus suggested itself to my mind.

While watching the case it was noticed that the tumour was subject to slow alteration in size, and the time of greatest enlargement appeared to correspond with that of greatest pain.

Viewed in the light of post-operative knowledge the explanation of these symptoms appears to be that at every menstrual period some exudation occurred into the little closed mucous chamber of the horn, that the distension of this attained its maximum about the fifth day after the onset of the period, and that it then slowly subsided. This process must itself have been painful and must have caused some inflammation of the horn, resulting in increased pain and in the adhesions of its peritoneal surface.

THE
RELATIONSHIP OF THE NOSE
TO
PULMONARY CONSUMPTION.

By S. HORACE LAW, M.D., F.R.C.S.I.,
Throat Surgeon to the Adelaide Hospital and Surgeon to the Dublin Throat and Ear Hospital.

The object of this paper is to bring forward and collect together some thoughts on the part nasal respiration plays in the prevention of phthisis by adequately clearing the inspired air of infective germs, and in order to render the meaning clear the headings of the various paragraphs which have been compiled in the form of statement and conclusion will be put in tabular form.

1. The tubercle bacillus is always present.
2. It is equally constantly inhaled.
3. The nose is the proper path for respiration and is so constructed that it strains the air passing through it.
4. Infection is less likely when nasal respiration is carried on.
5. Catarrh lowers body resistance.
6. Catarrh is always present in common forms of nasal obstruction.
7. Therefore in cases of nasal obstruction we have lowered resistance and increased chances of infection due to germs inhaled through mouth.
8. Therefore, removal of nasal trouble will eliminate the inhalation of germs to a considerable extent and increase the resisting power.

Special attention of late years has been concentrated on the question of prevention and cure of tuberculous lung disease. Special hospitals and sanatoria have been built and are doing excellent work in curing and alleviating cases, not to speak of their marked effect in teaching their inmates habits of cleanliness, which they take back with them to their homes and thus lessen the spread of infection to those with whom they are brought in contact. Thus, though the opportunities for infection may and are reduced, it is not within the range of possibility at present to isolate all persons suffering from tuberculous disease, so that in daily life every one must be exposed more or less to the bacilli of tuberculosis. That we are not all tuberculous may be set down to the innate power of resistance to invasion present in all living tissue.

The mode of infection in ordinary phthisis has been much debated, and the old theory of direct inspiration of the germs into the lungs is no longer tenable, for if the person be a nose breather the germs have to run the gauntlet of the vibrissæ and the nasal mucous membrane armed with the ever active cilia; again, if he be a mouth breather, the strong probability is, that the germs will be caught on the damp walls of the pharynx, &c., but even supposing that the germs succeed in passing down the trachea the residual air in the lungs will form a barrier to their further advance, and it is difficult to see how they could ever reach the air cells *via* the air passages. We are therefore obliged to look for other paths of infection.

Baumgarten, in the *Wiener Med. Wochenschrift*, November 2nd, 1901, describes some experiments carried out by him, where a typical apical tuberculosis was produced by the injection of tuberculous bacilli into such remote parts as the eye, urethra, bladder, and under the skin, clearly showing that the path of infection must, or at any rate may be by the lymphatics.

Wright, in the *Medical News*, January 19th, 1902, p. 85, says, "We must assume at present that the tubercle bacillus passes into the lymphatics through the mucous membranes of the naso- and oro-pharynx in a very large proportion of cases of pulmonary infection. That tubercle bacilli may be found in the tonsils when no tuberculosis is present in other parts of the body has been demonstrated by Dieulafoy, who inoculated sixty guinea-pigs with tonsillar tissue. Eight of them, 13 per cent., died of tuberculosis; with adenoid tissue taken with the same precautions—that is, that no tuberculous lesion could be found in the subject from which these pieces of tissue were taken—thirty-five guinea-pigs were inoculated, seven, or 20 per cent, succumbed.

To sum up the foregoing we say: That the tubercle bacillus is certain to finds its way into the upper air passages, and that the lymphatics give a ready means of transmission to the usual sites of tuberculous manifestations.

It will be readily admitted that the best protection against infection is a normal nose, allowing proper nasal respiration with its concomitant straining and warming of the inspired air, and a normal function in the glands of the nasal mucous membrane, so that the proper amount of moisture may be supplied and the cilia kept in active working order; the germs will thus most probably be caught and removed, long before they reach the lymphoid tissue, where, doubtless, even if they did arrive in a normal individual, they would soon cease to exist.

How far different must the condition be in a nose whose function is impaired or almost destroyed; in the first place, most of the inspired air passes in through the mouth, and the infective germs are carried straight against the tonsils, pharyngeal walls, &c. Here we have no straining apparatus, and stratified instead of columnar ciliated epithelium, so that it is far easier for the bacilli to find their way into the lymphoid tissue. Here in a healthy subject the resistance of the tissues will overcome most of them, but in the case under discussion we are considering a mouth-breather, and possibly an individual with hypertropied lymphoid tissue. This is clearly not a normal condition, and the power of resistance in the tissues will therefore depend on the amount of deviation from the normal.

In the second place, in all conditions of nasal obstruction, from whatever cause, catarrh to some extent is present, and therefore, following the line of argument above, a lowering of resistance. Osler, in his "Text-Book on Medicine," in the chapter on tuberculosis, mentions, under the heading of "Conditions Influencing Infections," certain local conditions such as catarrh, and says, "How often is a neglected cold blamed as the starting point of the disease." It seems to act by lowering the resistance and favouring the conditions which enable the bacilli to enter the system, or, when once in it, to develop.

If this then is the case surely it is our bounden duty to eliminate as far as possible this weakening of the resisting power. If this catarrh, *plus* whatever condition which caused it can be cured, the patient has had removed one path of infection, and his resistance to germ infection is increased. In the large majority of cases this can be done. Take the very common one of adenoids and tonsils. They are removed, the child improves at once, and the catarrhal condition ceases. Surely we have a right to claim that the power of resisting bacterial invasion has been much increased in this case. The child might never have got tuberculosis, but at any rate a weak point has been strengthened.

Such common conditions as chronic hypertrophic rhinitis, chronic atrophic rhinitis, suppurative disease of the accessory sinuses, polypi, adenoids and enlarged tonsils, all have catarrh accompanying them and are amenable to treatment. Nowadays it is the fashion to have one's nose cleared, and undoubtedly when proper moderation is observed, nothing but good can result, and it is safe to conclude that many are saved from pulmonary tuberculosis by timely attention to nasal respiration, not to speak of the comfort given to the patient at the same time. How much has been and will be done in this direction is hard to say, for it is in prevention of infection rather than in cure after infection that the brightest hope lies. The question of nasal treatment in the tuberculous subject is totally different and involves many serious considerations, such as strength, loss of blood, loss of appetite due to the frequent use of cocaine, and will not be considered here. It only remains to lay stress upon the fact that the coming generation will start out in life with a better chance of escaping tuberculosis by reason of the fact that of one the main paths of infection is now carefully watched and, as far as may be, kept in a normal and healthy condition.

SOME COMPLICATIONS ARISING SUBSEQUENTLY TO CŒLIOTOMY. (a)

By FRED. BOWREMAN JESSETT, F.R.C.S.,

Surgeon to the Cancer Hospital, Brompton.

I have thought the subject I have chosen for my paper might be of interest to the Fellows of the Society, as scarcely a meeting is allowed to pass without the exhibition of numerous specimens of growths or organs removed by cœliotomy. Many of these specimens have been removed only a few days or hours before exhibition, and in a very large proportion of instances the operations are reported to have been attended with a successful issue. It is very rarely, however, that we hear anything of the after history of the patients from whom these specimens have been removed, and I have often thought and wondered if all of them have been so much benefited as they themselves anticipated or the operator could have wished. I think it will be generally admitted that after hysterectomy, abdominal or vaginal, after ovariotomy or even oöphorectomy, or after the removal of the tubes for hydro- or pyosalpinx, it is not uncommon for patients to return in a few months complaining of acute pains, referable most commonly to the region of the pelvis, but not infrequently to other parts of the abdomen. On most careful examination nothing may be found to account for these troubles, and often they are attributed to neurosis, and the patient told that in time her pain will cease, and this undoubtedly in many instances is true, but, too often, the patient continues to suffer for an indefinite period.

It is very desirable, therefore, to try and discover the causes of these troubles, and it is for this purpose that I venture to lay before the Society some of my experiences.

It is probable that in a large number of cases of cœliotomy, subsequent adhesions are formed, most frequently to the parietal wound or to the stump left from the operation, and the frequency with which they are met with no doubt depends somewhat upon the presence of slight sepsis. The more aseptic the operation and the less the peritoneum is injured or manipulated, the less likely are these adhesions to occur, and; if they do occur, they will be slighter and more fragile. I cannot, however, help thinking, that some patients are much more liable than others to contract adhesions. When adhesions have formed, pain is sure to follow to a greater or lesser extent, and the surgeon should when operating bear this in mind, and should pay special attention to the toilet of the peritoneum before closing the wound. He should be careful to see that no blood clot is left either in the pouch of Douglas or between the intestines, and, above all, to be careful to draw down the great omentum over the intestines, as less trouble will arise from adhesion of this than if by any accident a loop of intestine becomes glued to the wound.

If the case be one of ordinary ovariotomy or oöphorectomy, the stump left after removing the cyst, tube or ovary should be carefully stitched over and buried so as to completely cover it in with peritoneum. The same care must be taken in an hysterectomy, the removal of a kidney or appendix, to see that the peritoneum is neatly united over the seat of operation, so as to present no uncovered surface. For this stitching ordinary sterilised catgut should be used, not silk.

The adhesions formed after cœliotomy may not only be the cause of pain and great discomfort, but also of serious peril to the patient. I have in a few cases had to open the abdomen a second time for the relief of pain, and in every case have found adhesions, which on being divided or separated have given relief. I have seen the same thing occur in the cases of other surgeons. I have also had to reopen the abdomen for the relief of intestinal obstruction caused either by a band of lymph stretching across and constricting the bowel, or for a volvulus, the result of adhesion of two portions of the bowel, owing probably to the deposit of a blood-clot. In one case the abdomen was opened no less than five times, thrice by myself and twice by another surgeon. This patient was operated on in the first instance for fibro-cystic diseases of the ovaries, for which oöphorectomy was performed; she made an excellent recovery and left the hospital; subsequently, about three months after the operation, she returned complaining of acute pain and much distension; she was treated for some weeks, but the pain becoming more distressing, she was taken into the hospital and the abdomen reopened; a band of lymph was found stretching from the omentum to the stump of the left side; this band clearly caused constriction of the sigmoid flexure when that portion of the intestine was loaded. The band was ligatured in two places and removed. A good recovery resulted, but in a short time she again returned complaining of acute pain in the abdomen; I being out of town, she migrated to another hospital, where her abdomen was again opened, and the adhesions discovered there were torn down, and a good recovery resulted. She was subsequently, I believe, operated on again by the same surgeon, and more adhesions found. After this she remained well for some considerable period, when she consulted me again, complaining that it was with the greatest difficulty the bowels could be moved, always requiring medicine and enemata, and giving her great pain. On admission the abdomen was distended, especially along the site of the ascending colon, and chiefly at the hepatic flexure. I may say that in the last operation the incision was made over the right semilunar line. From the symptoms it was considered an adhesion probably existed causing either a kink in the colon below the point of protuberance, or a band existed causing constriction. On now operating adhesions, for the fifth time, were discovered along the whole length of the former incision, the omentum was adherent, very much thickened, and drawn considerably to the right, causing the transverse colon to be dragged down, thus creating an acute flexion at the hepatic flexure of the colon, and it was readily seen that if the bowels became at all constipated great pain and difficulty would be caused. The adhesion was carefully divided and the omentum freed, great care being taken in stitching the parietal peritoneum first with catgut and the other layers of the parietes, layer by layer, with specially prepared ten-day gut. The patient experienced immediate relief, and has continued well since, and I trust will remain so.

(a) Read before the British Gynæcological Society on Thursday, October 9th, 1902.

Another cause of trouble after cœliotomy, more especially after hysterectomy, is due to adhesion or kinking of the ureter, or the possible including the ureter in one of the ligatures. This complication gives rise to very great distress with hydronephrosis. In one case I have seen complete occlusion of both ureters, this case was one of very large sloughing fibroid of the uterus in which abdominal hysterectomy was performed. As no urine was voided for twenty-four hours, after consultation it was decided to open the abdomen again, suspecting that the ureter might have been included in the ligatures which was applied to the uterine arteries. On examination, however, it was discovered that the ligatures were quite free from the ureter, but on being tied the tissues were dragged so as to cause a kink in the ureter, which was dilated considerably above. Upon liberating the ligatures the kink was relieved and urine at once passed into the bladder. This case, at the operation on which I was present, made a deep impression on my mind, and convinced me of the wisdom, in any future case when no urine was passed and it was proved by catheterisation that none had entered the bladder, of at once placing the patient under an anæsthetic and reopening the abdomen with a view of examining if there was any constriction or kinking of the ureters.

To avoid possible risk of such an accident I think it is well not to ligature the uterine arteries until the anterior and posterior flaps of peritoneum have been reflected from the uterus, when the vessels are readily felt running up the side of the cervix and can be ligatured without including other tissues. I do not agree with the dictum laid down by some authorities to cut across the vessels before ligaturing and then catch up the bleeding points, as, in the first place, a very large amount of blood will very quickly escape, filling the pelvis, and, secondly, these vessels, from having some considerable tension placed upon them in pulling the uterus with its tumour out of the pelvis, often retract very much, and I have seen considerable difficulty experienced in catching them up, and a large quantity of blood lost before they could be secured.

The fact must not be lost sight of that the appendix sometimes becomes involved, and that all the symptoms of acute appendicitis may occur after the removal of the appendages on the right side. Indeed, it sometimes happens that symptoms of appendicitis precede operation, and when the abdomen is opened the appendix is found adherent to the tube or ovary. I have met with two such cases in my practice; in one the appendix was firmly adherent to the fimbriated extremity of the tube, and in the other it was attached to the ovary apparently where one of the Graafian follicles had discharged itself.

I had occasion to operate on a patient who had had her right tube and ovary removed for a pyosalpinx by a surgeon. She had made an excellent recovery, and all went well for some two or three months, when she was seized with acute pain in her right iliac region and all the symptoms of acute appendicitis. I advised immediate operation, and on opening the abdomen found the appendix firmly adherent to the site of the first operation, and it was with some difficulty that I was enabled to release it; this, however, was safely accomplished and the appendix removed, and the patient made a good recovery.

Another cause of pain is sometimes due to the ovary, one or both of which have been left after an hysterectomy, becoming adherent to and bound down by adhesion to the floor of the pelvis at the line of union of the peritoneum; this I think is more likely to occur when silk is used for the stitching of the peritoneal flaps. I always prefer using catgut specially prepared for this. In case of complete hysterectomy it sometimes happens that a loop of intestine, or more frequently the omentum, becomes adherent to the site of the opening into the vagina, causing, in the case of the bowel being adherent, acute flexion and possible obstruction; this is more likely to occur in cases of vaginal hysterectomy if care is not taken to draw the peritoneal flaps well down into the vagina. In the early days of vaginal hysterectomy I met with two or three such cases.

To avoid the trouble of adhesion I have for some time now used specially prepared catgut for all suturing of the peritoneum, also for ligaturing any vessels or adhesions that may exist, using fine silk only for the ligaturing of the ovarian and uterine arteries. I am most careful to bury all stumps of tumours, and to suture very carefully any portion of peritoneum that may have been torn and cut. The parietal peritoneum I close with a continuous suture of catgut, then place about three to six interrupted sutures of specially prepared gut through the fascia and muscle, letting them be about one inch apart; next I unite the fascia with a continuous suture of catgut, and finally unite the edges of the skin with a continuous suture of fine silk or horse hair. These are removed on the tenth day and a strip of plaster applied.

With respect to the after-treatment, I always, as a routine treatment, give gr. v. of calomel the night of the day after operation, and a soap and water enema on the morning following. The importance of getting the bowels to act within thirty-six or forty-eight hours after cœliotomy cannot be over-estimated, whether by means of calomel or saline aperients perhaps it does not signify, one operator prefers one, another operator likes another. To the late Lawson Tait perhaps, is due the credit for insisting on this, but it will be remembered he introduced the giving of purgatives for the treatment of peritonitis, and here, I venture to think, he mistook tympanitis due to paresis of the bowel, which so frequently occurs after cœliotomies, for peritonitis. Paresis of the bowel and tympanitis, as we all know now, is a very common complication after these operations, especially when there have been many adhesions necessitating the undue manipulation of the intestines; a very troublesome symptom it is, often requiring several doses of aperient, and the repetition of turpentine enemata before a proper action can be obtained. Distension, however, can often be relieved by the introduction of the long tube "per anum," and I am in the habit of allowing a short enema tube to be inserted and left in the rectum, so that the flatus may come away more readily.

Many cases that died after operation in the early days of abdominal section, and which were returned as having died of peritonitis, I am convinced really succumbed to this cause, tympanitis due to paresis of the bowel, owing to the old practice of giving opium with a view of keeping the bowels confined for several days after the operation.

In the limits of this paper I have only ventured to point out a few of the complications that are so often met with after these abdominal operations; had I extended my observations to those complications which sometimes follow operation for gastrostomy, gastro-enterostomy, or other intestinal operations, or for operations on the kidney, gall-bladder and the like, all of which, by the way, are practically outside the domain of gynæcology, a paper of indefinite length might be written.

The questions which naturally arise are what is best to be done for these patients who come to us so frequently complaining of these after-claps. Possibly I may be told by some operators that the methods adopted by them preclude the possibility of such complications; if there are any such I shall be glad to hear how they manage it, as I must candidly admit that I am occasionally confronted with patients who suffer in the way I have described, and have, several times, been consulted by patients so suffering, who have been operated on by others.

The question very naturally arises—What is the best and most appropriate treatment? Personally, I always hold out hopes, unless there are some acute and pressing symptoms in which delay would endanger the patient's life, that the pain, &c., complained of will in time disappear, and, as in many cases it undoubtedly does do so, I should not advise too hasty operative interference.

Should, however, the symptoms continue, and the patient's happiness and usefulness be imperilled, I should not hesitate to reopen the abdomen, and carefully to divide any adhesions that might exist, and either ligature or stitch them over; in dealing with omentum I think it better, after ligaturing, to fold the end over and fix it with a few catgut sutures so as to cover the divided portion with peritoneum, treating the distal end in the same manner if practicable.

One other not uncommon after complication is ventral hernia. This, I am pleased to say, is not so frequently met with now as formerly, and undoubtedly this is due to the greater care which is now taken in the technique of closing the parietal wound and the more rare use of drainage tubes. I have no doubt that the fixing the tissues in distinct layers with catgut, prepared in such a way as to ensure it lasting for some ten days before becoming absorbed, is by far the best method, and I cannot lay too much stress upon the necessity of first being most careful to stitch the peritoneum with a continuous suture so as to prevent any of the tissues being exposed to the peritoneal cavity. For this ordinary catgut is quite sufficient, as the peritoneum finally unites in about thirty-six hours; next, to bring the muscular tissue and fascia together by interrupted sutures of ten-day catgut, and then a continuous suture to ensure the close approximation of the superficial fascia, and lastly, the continuous suture for the skin with horsehair or fine silk.

I never now use silk for buried sutures, as, let it be prepared ever so carefully, it will occasionally give trouble by establishing stitch abscesses, which are not only painful but always tiresome as retarding the convalescence of the patient.

DENTAL SEPSIS AND SYSTEMIC DISEASE.

By HENRY SEWILL, M.R.C.S., L.D.S.,

Past President Odontological Society.

Within the last few years it has become a matter of routine among physicians to refer cases of anæmia and other chronic diseases to the dental surgeon, for a report as to the existence of septic conditions of the teeth likely to be associated as factors in the causation or aggravation of the malady. To this circumstance the fact is due that a very large number of cases of anæmia have latterly passed under my observation, and my interest in the disease having been aroused has been maintained. Dr. Walsh does not need any compliment from me; but perhaps he may not be offended if I venture the opinion that the paper on "Anæmia," contributed to your issue of September 24th, forms one of the best summaries of current knowledge—thoroughly practical, whilst based upon science—that has ever been published. Dr. Walsh, however, whilst strongly emphasising the necessity of attention to the teeth as an early step in routine treatment, does not do more than refer cursorily to this part of the subject.

For effective study of this question it is desirable a correct idea should be had of the pathological conditions of the teeth really capable of contributing to the etiological effects ascribed to them. On this matter some confusion evidently exists. Many writers mention merely dental caries or decay as the disease giving rise to oral sepsis. There is, in fact, nothing in the nature of dental caries itself of a virulently septic character; and it is only in the advanced stages of the disease, when the pulp has become exposed and inflamed, and when the inflammation having extended to the periosteum has terminated in alveolar abscess and necrosis of roots, that serious septic effects can become developed. Caries in its essence consists merely of solution of enamel and dentine by acids, the products of fermenting foreign particles lodged upon the surfaces or within minute inherent flaws in the enamel. As soon as a cavity is excavated it becomes filled with decomposing *débris*, and this no doubt often forms a favourable nidus for the proliferation of pyogenic or pathogenic organisms which enter the mouth from the external atmosphere. How far dental caries can in this stage contribute towards systemic infection remains to be investigated; but at this stage of the disease suppuration does not occur, nor does appreciable discharge of septic matter from the cavities take place. It is impossible to believe that systemic infection could be caused merely by the presence of a few carious teeth with simple cavities full of decomposing organic particles. As soon as the pulp is laid open by caries it becomes more or less inflamed. Its surface may then pour out a minute quantity of foul pus; it may become gangrenous, partly or entirely; and if numerous teeth exist in this state they may, perhaps, constitute an appreciable source of septic infection. When alveolar abscess supervenes, necrosis of roots commonly occurs; and to chronic alveolar abscess, the sequel of caries, may be traced the source probably of the most virulent purulent discharge connected with dental disease. Necrosed roots are equivalent to necrosed bone, and the peculiar infective character of pus from such a source must be always borne in mind. In some mouths there exist numbers of necrosed roots the centres of suppuration, so that the patient is constantly swallowing large quantities of fœtid pus. This condition is very common in young children in whose mouths great part of the first dentition will often be found broken down by caries and the seat of alveolar abscesses.

The dental disease which, beyond all others, is associated with the etiology of systemic maladies, and has been by Dr. Hunter declared capable alone of giving rise to pernicious anæmia, is that known as pyorrhœa alveolaris.

Pyorrhœa alveolaris has no connection with caries. It is a disease of middle life and old age only. It is a process of slow wasting of the alveoli and gradual shedding of the teeth, attended by very slight inflammation and constant discharge of foul pus from within the free edge of the gum and alveolus.

In a large number of cases of pyorrhœa there is a singular absence of caries, and the teeth are often of the best structural character. It occurs in many instances in patients whose care of their teeth amounts to fastidiousness. The malady is extremely chronic; many months elapse before each affected tooth is shed. The disease starts in one or two teeth and gradually affects others not necessarily adjacent, until in the end the whole set becomes involved. Of the etiology of pyorrhœa virtually nothing is known. Knowledge of its pathology is almost equally lacking whilst prognosis is always unfavourable, treatment being rarely able to do more than mitigate the severity of symptoms and slightly check their course. This disease, although common enough in dental practice, is very rare compared with caries.

The symptoms of pyorrhœa begin with a spongy, slightly swollen condition of the free margins of the gums. Front teeth, oftenest those of the lower jaw, are as a rule first attacked. The gums recede, and their recession is often followed by deposit of tartar (ordinary salivary calculus) upon the denuded surfaces of the teeth. Slight inflammation of the peridental membrane is next soon recognisable. Swelling of the membrane raises the tooth and slightly loosens it in the socket, and so pockets are formed around the tooth into which a probe passes easily to a greater or less distance along the root. From these pockets constant discharge of foul-smelling pus or muco-purulent fluid takes place. The discharge in some cases is comparatively small, pressure along the line of the gum being needed to disclose its presence. In many cases the discharge is increased; in a few it becomes profuse.

Besides the masses of ordinary tartar which often—although by no means invariably—are deposited on the teeth there are usually to be discovered small nodules of dense consistency and dark colour scattered over the denuded surfaces within the gum pockets.

The alveoli waste more rapidly than the gum, and the "pockets" become deepened and enlarged. At length each tooth becomes so loosened that the patient removes it with his fingers if it is not forced out by accidental pressure during mastication. Pain throughout the malady is slight until the tooth has become much loosened. Then a jar during mastication will often set up an attack of sub-acute or acute inflammation; and the swelling within the socket rendering the tooth still looser, the patient will often in this condition apply for relief.

The diagnosis of pyorrhœa rarely presents any difficulty. It may, however, be mistaken for alveolar abscess due to caries or injury when only one or two teeth are affected, but there are signs and symptoms which easily differentiate it for those familiar with dental diseases.

In a large number of instances pyorrhœa is associated with disturbance of the general health; it is often present in anæmia. In ordinary cases the general health perhaps suffers most in sensitive patients. In this class the constant discharge of noisome pus, with the consciousness that their breath is tainted and its odour recognisable by others as well as by themselves, are enough alone to cause considerable depression, apart from any effect produced by the constant passage into the stomach of foul purulent discharges. In cases of long standing it is often a question whether the pyorrhœa has arisen from the lowered health or the lowered health from the depressing effect of the local disease. Dr. Hunter seems to ascribe the causation of pernicious anæmia in some cases solely to such septic poisoning. Many patients date their ill-health from the period of development of the pyorrhœa, and in a large number of cases great improvement begins, and the health becomes re-established when vigorous local treatment has been applied, or when the disease has run its course and the patient has learnt to wear and use artificial substitutes for the lost teeth. A certain number of cases are to be observed in which pyorrhœa follows and seems due to the effects of long exhausting illnesses such as typhoid fever. On the other hand, inquiry and investigation fail in most cases to discover any organic or functional disorder capable of giving origin to the pyorrhœa.

With regard to the pathology of this malady there exists one significant fact which seems to dispose of many speculations as to the real seat of the morbid process. This fact is that on extraction of a tooth the seat of pyorrhœa the alveolus at once assumes a healthy condition; the discharge from that particular socket at once ceases; the gum heals normally, and if absorption of the bone continues it is not notably more rapid than under ordinary conditions. These facts point to the conclusion that the disease belongs essentially to the tooth and its periosteum, and is not due to an independent morbid condition of the investing gum and bone. Examination of extracted teeth yields only negative results.

The treatment of pyorrhœa must be first directed to thorough removal of tartar. This, in these cases, is a difficult operation, and can hardly be properly carried out except by a dental surgeon or an operator specially qualified. General antisepsis of the mouth must be assiduously practised by the patient.

A soft toothbrush and a suitable dentifrice and antiseptic lotions must be used. The spaces between the teeth, which become widened as the alveoli waste, should be frequently cleared of foreign particles with a thin quill tooth-pick. In using a lotion the mouth should be partly filled and the fluid forced to and fro between the teeth by the movement of the lips. More direct applications must be made to the necks of the teeth and within the gum pockets around. An aqueous solution of perchloride of mercury, 1 in 3,000, is one of the most efficacious agents, but others may be, of course, employed. The perchloride solution is best applied on tiny twisted ropes of absorbent cotton. The mouth having been thoroughly rinsed (or, better, the pockets around the teeth syringed), access of saliva can be prevented by a folded napkin, and the small ropes of wool saturated with antiseptic can be packed by a small blunt probe around the teeth within the gum pockets and allowed to remain for a few minutes. This can be repeated again and again, care being taken, when a poisonous agent is being used, to make the patient rinse the mouth freely each time the napkin is removed. A great variety of antiseptics have been tried in the treatment of this disease, but probably none can be more efficacious than perchloride of mercury.

Carbolic acid diluted with eucalyptus oil to a strength of one in forty may be used, care being taken to apply the cotton ropes slightly moist only, so as to avoid excoriation of the gums. Sulphate of copper in strong solution or applied in powder to the gum pouches is relied upon by some practitioners; others use permanganate of potash (Condy's fluid). With Condy's fluid good effects are produced. It has the advantage of being practically non-poisonous, and can be entrusted in full strength to the personal use of the patient.

In some cases the patient may be trusted to make the direct application of a strong antiseptic to his own teeth; but in most cases, if the treatment is to be of great service, he must pay frequent visits to the dentist. The assiduous employment of antiseptic lotions by the patient with scaling and occasional more vigorous treatment by the dentist are usually enough to mitigate the worst symptoms, and to prevent the patient suffering severely from the remoter effects on the general health, which this disease, and especially the constant passage into the stomach of fœtid pus are undoubtedly capable of exciting.

Teeth which have become so loose as to be constant sources of irritation should be extracted. This improves the condition of the mouth generally, and often seems to retard the progress of the disease; but extraction of affected teeth, even in an early stage of pyorrhœa, does not put an end to the progress of the disease, nor do more than temporarily check its advance. When numerous teeth have been lost, great comfort will often be afforded by the adaptation of a perfectly-fitting frame of vulcanite to embrace the necks of the remaining teeth, and to hold artificial substitutes in the vacant places. The frames, which for the upper jaw should be on the "suction" plan, must closely surround the teeth without causing any strain upon them. It is well patients should begin to wear artificial teeth before a late period of the disease; so that when the end comes, and all the teeth are lost, they may have acquired the facility to use artificial substitutes which is usually attained only by considerable practice.

In searching for septic conditions associated with dental disease the possible existence of empyema of the antrum must not be overlooked. This disease in a large proportion of cases is caused by chronic alveolar abscesses around roots of teeth the apices of which reach the floor of the antrum, and are separated from the cavity by merely a thin layer of bone. Empyema once established, and pus constantly secreted by the mucous membrane, the antrum cannot be perfectly emptied except by art. Pus flows out when it reaches the level of the natural opening into the nose, or when the head is inclined forwards; but in recumbency the discharge may find its way *via* the posterior nares into the pharynx. The pus is always foul, mostly horribly fœtid. In many cases patients suffer for months or years before a correct diagnosis of their disease is made. During all this time the patient, from six to eight hours out of the twenty-four, may have been swallowing a quantity of virulently septic matter sufficient in itself perhaps to give origin to the grave systemic diseases ascribed by so many competent observers to such simple causes.

THE FIRST STAGE OF LABOUR
IN RELATION TO
UTERINE RUPTURE.

By ERNEST HASTINGS TWEEDY, F.R.C.P.I.,
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The first stage of labour can correctly be stated to comprise the period in which the os is in process of dilatation; its beginning is not so easily indicated, nor has its ending been defined with precision Dr. Berry Hart has pointed out the futility of considering painful contractions of the uterus as indicative of its commencement. A uterine contraction without pain is certainly no indication, nor yet can the presence of a show—*i e.*, blood-stained mucous discharge—with accuracy be said to mark its origin. Again, cervical dilatation is of no trustworthy significance, for a patulous canal is not infrequently present long before labour begins. It seems to me that an accurate definition of the commencement of labour must take cognisance of that peculiar phenomenon known as uterine polarity. If this be so, then a contraction of the body of the uterus, accompanied by a relaxation of the circular fibres in the cervix, the processes being interdependent, will mark the commencement of labour.

The occurrence of uterine polarity does not seem to have received any sufficiently reasonable explanation; the one I now offer has, at all events, the merit of simplicity.

The arteries, veins and nerves which pass through the lower uterine segment must be subjected to a considerable amount of stretching force during the sudden increase of its area, brought about by a labour contraction. That the circulation suffers is evidenced by the serous infiltration and softening of the cervix, a result of impeded venous return. Hence congestion occasionally terminates in rupture of the vessels and the formation of a cervical hæmatoma. In a similar manner there seems little doubt that the nerves must be affected. Nerve impulses are easily inhibited by the over-stretching of a nerve, and when once this takes place a paresis of the circular muscle fibres in the cervix to which these nerves are distributed will occur.

A consideration of these views makes the etiology of uterine polarity quite understandable, and affords us a scientific basis for determining the onset of labour.

If we now turn to the ending of the first stage of labour, I find myself in sharp disagreement with the generally received definition of it—viz., that it terminates when the os is fully dilated. It is in my opinion erroneously held that a fully dilated os is at all times capable of permitting the passage of the fœtus through it. Abundant evidence is forthcoming to show that this is not so. Our dispensaries teem with patients suffering from torn cervices, the result of so-called normal delivery, Some of these, no doubt, may fairly be considered to result from misdirected efforts on the part of the attendant to hasten delivery, but a large number still remain that cannot be accounted for in this manner. These are the cases in which the first stage of labour has not ended on the full dilatation of the os, but rather at the time of the tearing of the os to permit of the passage of the fœtus through it.

This condition, induced by tension, may be more readily understood if we call to mind the somewhat analogous process which is observable in phimosis. If the blades of a forceps are pushed through the orifice of a phimosed prepuce, and then opened with force so as to bring about full expansion of the ring, we find that it assumes hard and rigid characteristics, with a knife-like, unyielding edge. Similarly, the os stretched to its fullest expansion becomes knife-edged, with thin, unyielding walls, and we speak of the condition as "rigidity of the os." When once the os has reached this stage of expansion it tears with the greatest facility, either spontaneously or in consequence of manipulations, carried out, perhaps, in the gentlest manner possible. This rupture, moreover, is hard to recognise as such by the fingers of the examining hand even during the process of its occurrence. An apparently very rapid dilatation is felt resembling closely the sudden relaxation of a spasmodic stricture.

It is probable that in this way arose the erroneous notion that a rigid os is the result of a muscular spasm. A moment's thought will demonstrate the untenability of such a theory. The fact that in spite of this so-called muscular spasm the os remains open, though the functions of the contracting muscle is to cause its closure, is sufficient to show the impossibility of associating in any causal connection the conditions one with the other. There seems little reason to doubt that a rigidity such as I have described indicates an expansion of the os to its utmost limit, short of a solution of continuity taking place.

An os in this state, incapable of further expansion, is still subjected to the pull of the uterine contractions throughout its entire circumference. These contractions are not equally effective in all directions. In the tug of war that takes place between them the posterior fibres gain the mastery of the others, the result being that the posterior cervical lip is taken completely up and becomes continuous with the post-vaginal wall. If the os cannot expand, it is evident that it must follow in the wake of the disappearing posterior cervical lip, and thus we find it moving in a direction upwards and backwards, dragging in its progress the anterior cervical lip after it, and causing that structure, in common with the anterior lower uterine segment, to thin out more and more. This thinning, brought about as just described, is at times so extensive that it closely simulates unruptured membranes, and may give the mistaken impression that the os is fully open. I have even known an attempt to be made to apply forceps under such circumstances. A cervix drawn out and thinned in this manner is erroneously said to be incarcerated, or nipped between the pubes and presenting part of the fœtus, and thus its inability to retract is accounted for. It is highly improbable that nipping of the cervix between the smooth pubic walls and the equally smooth fœtus is, under the conditions generally present, possible. Moreover, were it so incarcerated its liberation would be attended with infinitely greater difficulty than is experienced in the manipulation ordinarily advised for effecting this purpose. This manipulation not infrequently results in the tearing of the cervix.

If these views are accepted, it becomes at once evident that the ending of the first stage of labour cannot without exception be defined as occurring when the os is fully dilated.

The elongated anterior cervical lip set free by rupture becomes rapidly œdematous during the further progress of labour, and is occasionally found protruding through the vulva after delivery.

It is extraordinary to note the slight extent to which this complication has arrested the attention of obstetricians. It has been wrongly described as a hæmatoma of the cervix, and I have known of one instance in which it was torn from its attachments, under the mistaken impression that a portion of adherent placenta was being dealt with.

So far I have described rigidity of the os and the events which follow from it in cases of primiparæ. In them the infra-vaginal cervix is the weakest portion of the uterus, and its readiness to tear lessens the liability of the organ to rupture elsewhere.

In multiparæ, on the other hand, the deposition of fibrous tissue in the neighbourhood of old lacerations often renders the cervix exceedingly tough and inelastic, and thus interferes with its dilatation. Under these circumstances we have as a result of this moving upwards and backwards of the os great thinning of the anterior cervical lip. This lip will be formed by the anterior fornix of the vagina below and the anterior lower uterine segment above, the two structures lying one on top of the other. In the event of the os neither dilating nor yet tearing, a rupture of the lower uterine segment and vaginal vault is very likely to occur, as they become more and more thinned out by the pressure downwards exerted on them by the presenting portion of the fœtus and the counter forces exerted by uterine muscles at either side. Occasionally, however, it is the posterior fornix and posterior lower uterine segment that are torn. This can be explained by remembering that the uterine and posterior vaginal walls become continuous after the taking up of the cervical lip. The uterus thus may drag itself free from the vagina, the tear being continued into the cervix and up to the lateral walls of the uterus.

It is a curious fact that three-fourths of uterine ruptures which have been reported as occurring in Dublin within the past ten years were complicated by vaginal tears, while such ruptures are by no means the kind most commonly met with elsewhere, as all statistics show. Another point of interest in connection with our Dublin cases arises from the insidious method of their occurrence. Observer after observer has noted that in many instances the catastrophe was not preceded by signs which we are taught to associate with impending rupture. Moreover, it is in those cases in which the vaginal tear complicated the rupture that an absence of premonitory symptoms was noted. In consequence of the rarity of pelvic contraction among us, uterine rupture is not often encountered. The cases reported favour the belief that rupture takes place not often as a complication of the second stage of labour, but of the first.

Should these views be accepted, then the moving upwards and backwards of the os, which at the commencement of labour had been centrally situate, might well be regarded as a premonitory sign of rupture.

To summarise the points which to me seem of interest:

1. The first stage of labour begins when the polarity of the uterus is established.
2. Uterine polarity results from an over-stretched condition of the nerves which course through the lower uterine segment, and are distributed to the circular muscular fibres of the cervix. The painless uterine contractions and retractions of pregnancy thin out and stretch the segment, and thus ultimately induce polarity.
3. The cervix being fully dilated does not necessarily imply a sufficiently open os to permit of the passage of the fœtus.
4. The anterior cervical lip is not easily nipped or incarcerated between the pubes and the descending fœtus. The cause of its elongation is due rather to the retraction of the posterior cervical lip and the consequent dragging upwards of the os, which cannot sufficiently dilate to permit the passage of the fœtus through it.
5. Such an os will in the case of primiparæ rupture almost certainly in order to permit of the commencement of the second stage of labour—*i.e.*, an expansion sufficiently large to permit the passage of the greatest diameter of the presenting portion of the fœtus through it.
6. Such a laceration cannot be treated by immediate suture, not alone because of the great œdema of the anterior lip, but chiefly for the reason that the posterior lip is taken up, and there is therefore nothing to which to stretch it.
7. A multiparous cervix is not always the weakest portion of the uterus. When this is so, a uterine rupture occurring as a consequence of rigid os will be preceded by none of the usual premonitory symptoms, and the tear will be most likely to involve the vagina.

Transactions of Societies.

BRITISH GYNÆCOLOGICAL SOCIETY.

Meeting held Thursday, October 9th, 1902.

Frederick Bowreman Jessett, Past-President, in the Chair.

Specimens.

Professor J. W. Taylor, Birmingham, showed a recent specimen of

TUBAL GESTATION

in which at one end of the tubal sac was seen a congeries of large dilated thin-walled vessels which appeared to be on the point of bursting. The specimen suggested a form of rupture which at present had not been recognised—the rupture, not so much of the tubal sac as of the greater vessels at the placental site. Such a rupture would probably be attended by rapid and excessive bleeding, and its special character escape recognition when the hæmorrhage had caused the vessels to collapse.

Dr. **Macpherson Lawrie**, of Weymouth, showed a large

PYO-SALPINX

removed from a woman, æt. about 20, three months after her marriage; it had not led to any pelvic symptoms, and had been discovered by accident. He also showed two fibroids removed from sisters, æt. 37 and 39 respectively; both patients did well. A third sister had been operated on in St. Thomas' Hospital, and two others were awaiting operation for the same kind of tumour. There were nine sisters in the family: five had suffered from cataract and three from both cataract and fibroid tumours. He did not know of any connection between the two affections, but the history was an unusual one. The women were all unmarried, except the one operated on in St. Thomas' Hospital; he had no information as to children.

Mr. **Bowreman Jessett** showed

FOUR CASES ILLUSTRATING THE SIGNIFICANCE OF UTERINE HÆMORRHAGES DUE TO TUMOURS.

The four specimens are all from cases in which the question of uterine hæmorrhage was an important element in the diagnosis. (1) The first is a uterus removed by vaginal hysterectomy on account of carcinoma of the body. The patient was a woman, æt. 38, with a family history of phthisis but none of cancer. She was the mother of five children; all her confinements, though followed by debility and once by a mammary abscess, were fairly easy. Menstruation, established at seventeen, was irregular (six to eight weeks) with a scanty flow, but had latterly been more regular. She had been fairly healthy, but seven years ago had rheumatic fever, to which perhaps might be attributed a mitral duplication of the first sound of the heart. She was habitually constipated, her motions being hard and occasionally bloodstained, but had had attacks of diarrhœa. She came under my care in April, 1902, complaining of pain in her left side extending into the groin, and a foul yellowish discharge from her vagina. She said that about twelve months previously she had noticed this discharge, and had been sick in the morning on rising, and suffered a good deal of pain, which, however passed away after a couple of hours. After a time she found that she could not hold her water, and consulted a doctor, but had no treatment except vaginal douches. The discharge stopped for a time, but returned with increased severity and more pain, and she therefore came to the hospital. Beyond the fact that there was tenderness in both iliac regions, nothing was elicited by external examination. Internally, the cervix, hard and fibrous to the touch, was directed forwards, the uterus was not tender, but one ovary was prolapsed. *There was slight bleeding on examination.* On May 5th I removed the uterus and a cystic ovary through the vagina. She was discharged convalescent on June 2nd. On opening up the uterus the fundus was found to be the seat of carcinomatous deposit. (2) The second specimen, a comparatively small uterus with a number of sub-peritoneal fibroids, was taken by abdominal section from a single woman, æt. 35, admitted to the Cancer Hospital, June 28th of this year. The patient left the hospital convalescent on August 1st. (3) The third specimen removed from a sterile married woman, æt. 50, with a family history of cancer, is a uterus containing a large sub-mucous fibroid. She was admitted to the hospital on March 15th, 1902, complaining of inability to hold her water, abdominal pain of a gnawing character, and hæmorrhage from her vagina, occurring every fortnight and persisting for about a week. Five years previously she had had displacement of her uterus from lifting a heavy weight, and two years later suffered from a dragging pain in her abdomen, and found some difficulty in holding her water. On March 15th abdominal section under ether; the tumour was brought out of the abdomen with a myoma screw and removed, the stump covered with peritoneum and the abdominal wound sutured in layers. This patient did well for the first week and then suddenly collapsed, dying on March 24th. In this instance the hæmorrhage had been profuse and had been going on for three years. (4) The fourth specimen is also a submucous fibroid, and was removed from a woman, æt. 42, admitted to the Cancer Hospital on May 1st, 1902. Except for neuralgia she had always had good health till eight years ago when, after lifting a heavy weight, she felt faint, had profuse flooding, with large clots, and for two days great pain; after a week in bed she quite recovered and the bleeding did not return. In April, 1901, she found that her womb had fallen and projected to the size of an egg outside her body; it was replaced by a practitioner, who kept her in bed for a week, and she wore a ring till January 19th, when she was attacked with severe abdominal pain and could not pass water, which had to be drawn off for several days, and she was recommended to come to the Cancer Hospital. The lower part of her abdomen was then swollen and showed striæ, but the umbilicus was normal; a distinct tumour, as large as a cocoa-nut, could be felt in the right iliac region and extended towards the umbilicus; it was movable, hard, and without fluctuation. The tumour was removed by abdominal hysterectomy on May 20th, and the patient was discharged well on June 21st. In this case, with the exception of the single flooding eight years ago, there appears to have been no abnormal bleeding whatever.

Professor J. W. **Taylor** read a short communication upon a case of

UTERUS BICORNIS WITH RIGHT RUDIMENTARY HORN

which will be found on p. 427.

Dr. **Hodgson** asked whether it was absolutely certain that the specimen was a bicornual uterus; whether the condition might not have arisen in salpingitis; and whether the pain on the fifth day after the onset of the period might not be connected with the natural shedding of the uterine mucosa after menstruation.

Professor **Taylor** was quite certain that the condition was as he had described it. He had himself at first thought that the tumour might be a portion of the tube, but that idea was negatived by the fact that the round ligament was present only to the outer side of the tumour, and by the careful examination, made by Professor Leith, which showed that the structure of the walls and lining membrane of the cavity resembled that of a normal uterus rather than of a tube. Microscopically there was no trace of any communication between the cavity and the other horn. As regards the pain, no doubt at the onset of the period a process resembling menstruation took place in this cavity, though there was no blood, and the maximum distension by the accumulation of fluid was reached on the fifth day, when the size of the tumour was greatest; the pain diminished as the swelling subsided, but the addition of some peritoneal inflammation caused adhesions, and the attacks tended to increase in severity.

Mr. **Bowreman Jessett** then read a paper "On Some Complications arising subsequently to Cœliotomy," which will be found on p. 429.

Dr. **Macpherson Lawrie**, in thanking Mr. Jessett for his interesting paper, said that nothing could be more profitable than to report the after results of abdominal sections. He never himself felt happy till the patient's bowels had acted, and usually gave two ounces of castor oil which, in emulsion, was easily borne, and prompt and satisfactory in its results. In obstinate cases of sickness it should not be forgotten that the stomach tube was available; he had used it with the greatest advantage for emptying and washing out the viscus, and the method was worthy of more frequent adoption. He strongly advocated the use of swabs instead of sponges, having altogether abandoned sponges himself.

Professor **Taylor** concurred with Mr. Jessett that trouble after abdominal section was most commonly due to adhesions, he had cases in which the adhesion of the appendix or omentum to the stump of an ovariotomy, or of a loop of small intestine to the cut surface of the ovary after a conservative operation, had necessitated the reopening of the abdomen. He had used fine (ophthalmic) silk for buried sutures, especially so in resections of the bowel, and thought, where it was equal to the strain, it was as satisfactory, as easily absorbed, and as little irritating, as catgut. In one instance, in which the patient died from apoplexy some days after resection of the bowel, he had been able to verify this opinion. Like Dr. Lawrie, he preferred gauze swabs or pads to sponges, as they could be perfectly sterilised by superheated steam; his own were made in different sizes, of fifteen thicknesses of gauze, and held fluid well. In the obstipation and distension of the abdomen met with after abdominal section, too much influence, in his opinion, had been attributed to paresis of the intestine, there was often some peritonitis, and many cases could be saved by enemata and careful nursing. In regard to hernia, happily, since the practice of suturing the abdominal wound in layers had obtained, it was not so frequently met with; if one had not to use a drainage tube and an exact suture could be made for the whole length of the wound, perfect union would result. He used silk for the peritoneum, and passed silkworm gut through the muscles, fascia, and integument, sometimes using silk again for the fascia. The worst cases of hernia were in the days when the clamp was employed in hysterectomy.

Dr. **Richard Smith** quite agreed with Mr. Jessett's method of suturing the abdominal wall. At the Hospital for Women, Soho Square, the practice was to close the peritoneum with a continuous catgut suture, the fascia with stronger catgut, and the skin with fine silk or horsehair. He had for some years been convinced of the importance of paying attention to the condition of the stomach in cases of intestinal trouble. The stomach in many cases became dilated, a condition that was sometimes attributed to the anæsthetic and to the long time the patient was kept under it, perhaps two hours or more. Moreover, a prolonged liquid diet was apt to lead to gastric dilatation, feebleness and pain. Great relief would then be afforded by washing out the stomach.

Mr. **Charles Ryall** remarked that from his experience in reopening the abdomen after operations, he was struck by the fact that the adhesions he met with in former years were much firmer and more extensive than those usually found at the present day. This he attributed to the improvements in abdominal procedure; in earlier days antiseptics were almost invariably employed; now normal salt solution or sterile water was used if the abdomen was washed out at all. Adhesions might, however, be due to injury to the intestines from exposure to air or from excessive manipulation with the hands or with sponges; such injury led to stasis in the circulation and effusions into the peritoneal cavity, and when adjacent parts remained in undisturbed contact for any length of time, adhesions followed as a matter of course. Apart from that, there was apt to be stasis of the intestine, at all events as regards its contents, and hence the necessity for an early evacuation after operation, which should empty the bowel, stimulate the circulation, and re-establish the normal physiological condition of the parts.

Dr. **Hodgson** said, that after ether narcosis there was often a large amount of bilious secretion in the stomach, he thought that one of the reasons a purgative administered soon after operation was so beneficial, was that it carried away any such accumulation.

Mr. **Mansell Moullin** had been fortunate in having little personal experience of adhesions after operation. As bearing on the alleged influence of sepsis in their formation and the propriety of washing out the abdomen, he mentioned a case of double pyo-salpinx on which he had operated recently; he had washed out the peritoneal cavity, and had closed the wound in his usual way, and the patient recovered perfectly and was on the point of leaving the hospital a month afterwards, when symptoms of obstruction declared themselves and he had to open the abdomen. There were adhesions in every direction; one coil of intestine adherent to the stomach formed a constricting band, which had caused gangrene of the bowel. He resected the bowel, but the patient did not recover. He sometimes washed out the stomach, and was in favour of allowing the patient to drink freely after the anæsthetic: tea seemed to be the most grateful beverage, and if the patient did bring it up no harm was done.

Mr. **Jessett**, in reply, said that as regarded aperients he pinned his faith upon calomel, and approved of the routine practice of giving five grains on the morning after operation and repeating the dose if necessary. If the bowels were not relieved by this, and there were much distension, he would rely upon a saturated solution of sulphate of magnesia injected into the rectum. Dr. Macpherson Lawrie's suggestion as to clearing out the stomach was a valuable one, especially if vomiting were persistent. He had formerly practised the through-and-through suture of the abdominal parietes, but was now a complete convert to the method of suturing in layers, and thought the most important step was to secure the accurate approximation of the aponeuroses of the recti. He did not think it greatly mattered whether one used swabs or sponges so long as they were clean and antiseptic; personally he preferred sponges to work with, as he had found swabs apt to crumple into little lumps; swabs, however, offered the advantage that they only required thorough boiling to make them aseptic. He was sure that drainage through the wound was one of the chief causes of ventral hernia; undoubtedly, a better way of drainage was through the vagina. He thought it a mistake to wash out the abdomen, and never did so even if a pyo-salpinx broke under his hand, but made a most careful toilet of the peritoneum and inserted a drainage tube through the vagina.

OBSTETRICAL SOCIETY OF LONDON.

Meeting held Wednesday, October 8th, 1902.

Peter Horrocks, M.D., President, in the Chair.

UTERINE CANCER.

Dr. **Cuthbert Lockyer** referred to a case of uterine cancer brought before the Society last year. The history was as follows: E. H., æt. 35, married twenty years, had three children, was last confined fifteen years ago, had last abortion four years ago. Since 1901 she has never been well. She had had much hæmorrhage and pain in left side, and had had to take to bed. There was also a yellow discharge. When first seen patient was anæmic and weak. The body of uterus was enlarged. Examination showed no evidence of growth. A large dose of ergot was given, and further examination showed a large growth about the size of a hen's egg projecting from cervix into the vagina; both lips were affected. The patient was operated on in 1901, great difficulty being experienced in reaching the pouch of Douglas. The fundus uteri was drawn through the opening, and the suspected tissue removed. The vaginal wound was not closed, the ligature left long, and the opening plugged with gauze. A month later there was a recurrence of growth in the recto-vaginal septum, and patient died May, 1902, five months after operation. The uterus was shown, the growth being seen to extend into the internal os, but not to involve the body of uterus. Microscopically it appeared to be a squamous-celled epithelioma.

Dr. **Rose** expressed the opinion that when disease had passed beyond the uterus no operation was of any good.

The only trustworthy operation consisted in the removal of the entire uterus. Eight cases he had treated for cancer of cervix had remained free from recurrence for from four to fifteen years.

Dr. **SPENCER** was of opinion that recurrence rarely took place in the stump. He considered the best operation for cancer of cervix was to remove the cervix high up as well as part of the body, with the galvano-cautery. High amputation preceded by steaming was good. It was not, however, safe to cauterise the broad ligament.

Dr. **DUNCAN** considered that everything depended upon the extent of the disease. The cause of the great mortality was because surgeons did not hesitate to operate even when the vaginal walls and the pelvic glands were involved.

VAGINAL REMOVAL OF OVARIAN TUMOUR.

Mr. **JOHN W. TAYLOR**, Birmingham, showed specimen of an ovarian tumour removed by vaginal section from a woman two months advanced in pregnancy. Transfixion of pedicle and closure of the opening by continuous suture was the method adopted. This method was chosen in order to avoid the necessity for any abdominal wound, and the patient did well. On the fourth day after the operation the patient aborted. The chief point to be noticed, he observed, was that vaginal removal did not afford immunity against abortion.

CANCER OF BODY OF UTERUS.

Dr. **LEWERS** then showed a specimen of cancer of the body of the uterus in a single woman, æt. 55. The history dated back six months, the symptoms being a watery blood-stained discharge, but very little pain. It was impossible to remove the growth in one piece by vaginal hysterectomy, so pan-hysterectomy was performed. Before abdominal section a ligature was passed round the internal os.

Dr. **DUNCAN** remarked that in this case he thought the right plan was adopted, and that ligature of the os was a good plan before panhysterectomy.

Dr. **HORROCKS** added that he always resorted to this plan in order to prevent the contents of the uterus passing downwards in panhysterectomy.

SPECIMEN OF GRAVID UTERUS.

Dr. **VICTOR BONNEY** showed specimen of uterus with child, in the second stage of labour. The woman, æt. 29, primipara, was attended by a midwife. On opening the abdomen the uterus was found pressing on the child, the head of which could be felt through the vagina. All the liquor amnii had drained away. The speaker was struck by the flaccidity and looseness of the parts The child, in the third position, was freely movable; there was a total absence of vaginal cervix, and great difficulty in distinguishing the lower uterine segment.

SARCOMA OF UTERUS.

Dr. **McCANN** then showed a specimen of uterine sarcoma from a woman, æt. 53, who had ceased to menstruate twelve months previously. There was very severe hæmorrhage every three or four days for five months. Urine albuminous, the quantity increasing until it became almost solid on boiling. No secondary growth in lungs or pelvic organs. This was, he thought, probably a deciduoma, which is rare after the menopause.

CARCINOMA OF GRAVID UTERUS.

Dr. **DUNCAN** showed a specimen of a gravid uterus at the third month of gestation with epithelioma of cervix. The patient, æt. 34, for three months previously, had had a period every fifteen days, after which, for two months, nothing but a yellowish discharge. The uterus was freely movable. There was an epitheliomatous condition of cervix. The uterus was removed by vaginal hysterectomy, and patient was doing well.

A CASE OF CHRONIC INVERSION OF THE UTERUS.

Dr. **TAYLOR**, Birmingham, next related a case of chronic inversion of uterus of seven months' duration, irreducible by Tait's repositor (of the same kind as Aveling's repositor), causing dangerous hæmorrhage and severe vomiting. The patient had been married two years, and had her first child in 1899. Labour was tedious and difficult, and since then she had never been quite free from hæmorrhage. This had lately increased in frequency. She was examined by Dr. Buxton, who detected a tumour in the vagina. On entering hospital she was in the last stage of anæmia, and was nourished by nutrient enemata every four hours. On examination, a pear-shaped tumour was felt in the vagina, completely obstructing the vaginal canal. It was impossible to feel the fundus uteri through the abdomen, and there was found to be complete inversion. In September, 1899, the previous diagnosis of tumour in vagina was confirmed. The orifices of the Fallopian tubes could not be seen. A tranverse incision was made with scissors in the usual way, and the peritoneum was pushed up. After opening the peritoneum an attempt was made to reduce the inversion, this, however, being found impossible. An incision was then made in the anterior wall of the uterus and the inversion reduced, the incision being afterwards sutured with sterilised silk and a plug of iodoform gauze being placed between uterus and bladder. After a week the wound suppurated. Patient completely recovered. It was interesting to note that there was no definite line of demarcation between the uterus and the vagina. It would, perhaps, he suggested, have been better to cut a wedge-shaped piece of uterine wall from the body of uterus.

Mr. **BUTLER-SMYTHE** asked why Aveling's repositor had not been tried in this case? It was almost always successful, and was a simpler and more trustworthy instrument than that introduced by Tait; the former, being without any spring, was, moreover, less liable to slip during the attempts at replacement.

Dr. **HEYWOOD SMITH** suggested that in cases of chronic inversion of the uterus intermittent squeezing of the inverted fundus, though tedious, was in many cases very effectual—pressure tending to empty the blood vessels and causing the muscular tissue to relax. If pressure were then made with the thumb at the orifice of one of the oviducts where the uterine tissue was thinner, it was often comparatively easy to reduce the inversion.

Dr. **HANDFIELD-JONES** dissented from the line of treatment adopted in this case. In a similar case under his care, in which the inversion was so acute that no line of definition between the vagina and the end of the cervix could be made out, the uterus hung as a pear-shaped mass from the vaginal roof, and the finger passed from the vaginal mucous membrane on to the cervical mucous membrane without the possibility of distinction. As in the author's case, difficulty had arisen owing to the womb being so movable that it was extremely difficult to keep the cup of the Aveling's repositor on the uterine body. By packing swabs round the womb in the upper vagina and by patient watching reposition had ultimately been effected. The result of the operation in the author's case was to leave a long, weak scar in the anterior uterine wall, and this might be a source of danger if the patient became pregnant. He asked whether removal of the womb by the vagina would not have been a shorter, simpler operation, and attended by less shock.

Dr. **HERBERT SPENCER** held that there was no method of reducing an inverted uterus to be compared with reposition with Aveling's instrument, the cases being very rare in which the instrument failed. The difficulty due to the cup slipping off the fundus was present in many cases. In one case of the kind he had held the instrument in place, and had then rapidly reduced an inversion, which was previously very obstinate. He agreed with Dr. Heywood Smith that, with patience, continuous pressure (with Aveling's instrument) would overcome the resistance of the uterine muscle and restore the organ in nearly every case.

Dr. **DUNCAN** inclined to the opinion that if Aveling's repositor had been applied to the inversion, and kept there by packing the vagina carefully all round, the inversion would probably have been reduced.

Dr. **BLACKER** asked why the author had incised the uterus anteriorly, instead of adopting the plan of first opening Douglas's pouch and attempting reduction after separation of the adhesions as recommended by Kustner. In a recent case of his own, where he had reduced a chronic inversion of some four months' standing by Aveling's repositor, the patient again became pregnant and had recently been delivered of a child at term. As these cases usually occurred in young women, who might subsequently become pregnant, the danger of rupture of the uterus was considerable, more especially when it was necessary, as in the author's case, to carry the incision from the fundus uteri to the external os.

France.

[FROM OUR OWN CORRESPONDENT.]

PARIS, October 19th, 1902

TRACTION OF THE TONGUE IN POISONING.

IN referring to the death of Zola, M. Labord spoke, at the meeting of the Académie de Médecine, on the utility of rhythmical traction of the tongue in poisoning by carbonic oxide, by means of which Mme. Zola was resuscitated after twenty-five minutes of patient efforts. The speaker insisted particularly on the necessity of provoking by mechanical means the respiratory reflex, to obtain a favourable result. If the treatment is limited to giving inhalations of oxygen without having recourse to either traction of the tongue or artificial respiration by Sylvester's method, failure is certain.

EXTRA-UTERINE PREGNANCY.

M. Picque, at the Société de Chirurgie, communicated three cases of extra-uterine pregnancy. One of the cases was attributed at first to appendicitis, whereas in reality it was a case of rupture of the pregnant tube. M. Legneu said he made the same mistake in two similar cases.

EPILATION AND OXYGEN WATER.

According to Dr. Gallois, the application of oxygen water is a ready and inoffensive method of removing superfluous hair from the face and ephelides. A piece of cotton wool moistened with the solution is applied to the region for a few minutes once a day. In a short time the hairs begin to grow pale, and finally become an imperceptible down. In continuing the treatment long enough the hairs disappear, but are not entirely destroyed, as they break off near the roots. Consequently it is necessary to renew the applications from time to time.

In any case, this method possesses the advantage over the ordinary methods employed against hypertrichosis (epilation by instruments, electrolysis, epilatory pastes) of being simple, painless, and innocuous.

GONNORRHŒAL RHEUMATISM.

In speaking of the treatment of blennorrhagic rheumatism, M. Dezanneau drew attention to three points: importance of treating the urethritis; the good results obtained from local turpentine baths, and the indications for surgical treatment.

As regards the first, injections, or, what was better still, abundant washings out of the urethra, were absolutely necessary. The agents used were various—sublimate, rethyal, nitrate of silver—and gave good results, but he preferred permanganate of potash in 1-4000 or 2-4000. The injections shouldb e practised twice a day, and a quart of the weaker solution used each time for the first few days gradually, and when the urethra can tolerate it the stronger solution could be used. The local treatment generally sufficed to effect a cure, otherwise the usual internal remedies might be prescribed at the same time.

When in the course of the gonnorrhœa, rheumatism sets in, the limb should be placed in a position of complete rest, and the ice-bag applied or ointments. M. Championnèire applied mercurial ointment, covered with cotton wool, and a bandage. Kuel preferred compressed web, with the following solution:—

Salicylic acid, ʒiv;
Proof spirit, ℥iij;
Castor oil, ʒvj.

Balzer recommends the following ointment:—

Salicyclic acid
Laoline } ʒij;
Ess. of turpentine
Lard ℥ijss.

When the acute period has passed local revulsion came in. For that purpose M. Dezanneau employed:—

Black soap watery emulsion } ℥iv.
Ess. of turpentine

In certain cases of polyarthritis he prescribed turpentine baths, a half-pint for a bath of ten to twenty minutes.

Surgical intervention was indicated in two cases only: in purulent arthritis and in acute serous arthritis of a grave type. In purulent arthritis the articulation should be opened, and from one to two drachms of sublimate solution (1-4000) injected. That treatment has been highly recommended by Balzer. As to internal medical treatment, M. Dezanneau considered it of but little use. Salicylate of soda, antipyrine salol, salophene, iodine, &c., had been tried, but none of them gave satisfaction.

THE NURSING PROBLEM IN FRANCE.

The expulsion of the Sisters of Mercy from many French hospitals left a void which, so far, has not been adequately filled in respect of the nursing staff. This had to be hastily recruited from women of the lower classes who undertook the duties, the proper performance of which infers much devotion and self-sacrifice, merely as a livelihood. The results have been disastrous, and strenuous attempts are now being made to elevate the calling of hospital nursing into a profession to which might with propriety belong young women of the better educated classes. There are many difficulties in the way inherent to French social conventions, but if placed on a sound or respectable footing there is reason to hope that the career may be embraced by women who find in nursing something more than a mere *gagne pain.*

Germany.

[FROM OUR OWN CORRESPONDENT.]

BERLIN, October 18th, 1902.

THE *Archiv. f. Kl. Med.*, 73 Bd., pp. 411-421, contains the report of a case of

NEURITIS OF THE SPLANCHNIC NERVES,

by Prof. H. Stilling. The chief complaint of the patient, a man of 40, was an enormous swelling of the abdomen due to ascites. There was also swelling of the extremities, but not in a degree corresponding to the amount of fluid in the abdomen. Several litres of fluid were removed by an exploratory incision. Considerable and uniform enlargement of the liver was discovered. A drain was left in the wound. Death eventually took place from cardiac failure. At the autopsy the liver was found much enlarged, reaching to the iliac fossa.

It was extraordinarily vascular, and slightly granular on the upper surface. There was marked emphysema of the lungs, with a fresh red infarct in the lower part, and an embolus in the corresponding arterial branch. Heart large, right ventricle dilated and hypertrophic; dilatation of the left ventricle. There were also found marked neuritic changes in both splanchnic nerves. A longitudinal section of the right nerve showed an extraordinary absence of the dark marginal fibres, and only a few of the medulla-containing fibres were intact. The changes in the left nerve were not so advanced, but a number of degenerated fibres were observed in them. There degeneration could be followed up to the cœliac ganglion, in which, apart from a diminution of the thick primitive fibres, no important changes were noted. The prominent symptoms of ascites and static hyperæmia of the liver could not be explained by the cardiac condition, but its cause must be sought in the neuritis of the splanchnics, which was a disease independent of the heart and lungs. The cause of the nerve disease was not known. The great hyperæmia of the liver was due to the paralysis of the splanchnics, and this was aggravated by the emphysema of the lungs. The case was an example of neuropathic dropsy.

The writer notes the phlebitis obliterans of the hepatic vein described by Chiari. In a case of excessive ascites and enlargement of the liver, followed by œdema of the lower extremities, death took place from œdema of the lungs. The autopsy showed organised thrombi in the hepatic veins. Several branches of it in the substance of the liver were blocked by thrombus formation and growth of the intima. Possibly in this case, too, the primary lesion lay in the splanchnics.

OPERATIVE TREATMENT OF CIRRHOSIS OF THE LIVER.

The *D. Med. Zeit.*, October 2nd, contains a reference to this subject. One of the most important sequelæ of this disease is ascites. Cirrhotics ultimately fall victims to stasis of the portal system, and with permanent relief of the chief symptom the whole course of the disease is so favourably influenced that operative treatment of cirrhosis of the liver will not be an incorrect expression. The author, Prof. Lanz, says that the idea of setting up a collateral portal circulation was conceived almost simultaneously by Drummond in England and Prof. Talma, of Utrecht. A number of cases of cirrhosis of the liver had been observed in which there was no ascites, and this fact gave an indication in the direction of the artificial fresh side-tracks for the blood of the portal vein. To this end the operation of fixing the omentum to the abdominal wall was proposed, and this procedure, the so-called Talma operation, has been performed about sixty times with about forty recoveries.

The writer has advised this operation in five cases; two have had it performed, of the remaining three cases two have died. In one case in which the operation was performed the result was extraordinarily favourable, and the prompt improvement after the operation was beyond all expectation. In the second case the result is still doubtful. The operation itself is a very harmless one, and only dangerous when cardiac power has fallen too low. In such cases the operation should be performed under cocaine or injection of Schleich's solution.

In exceptional cases convulsions have been observed after operation. Experiments on animals have shown that when nourishment was entirely vegetarian such attacks never come on. Flesh foods should therefore be forbidden when such an operation is to be undertaken. In cases in which the outlook is so unfavourable, such as in ascites from cirrhosis, such an operation is quite justifiable, and it should be carried out before the patient's powers are too far reduced.

CARBONIC ACID AND DIGESTION.

In the *D. Arch. f. Kl. Med.* Prof. Fr. Penzolt discusses the action of carbonic acid during digestion. The investigation showed no considerable influence, but an undoubted improvement was observed in several directions. The secretion of gastric juice begins earlier and attains an average above the normal. If it fails earlier this is because digestion is completed more quickly. This was proved. Effervescing drinks are also useful in promoting diuresis in a large number of diseases. In diseases of the stomach with ulceration and stenosis of the pylorus such drinks are contraindicated on account of their property of inflating the stomach with gas. In deficiency of acid and want of tone, in view of the increased secretion and greater rapidity of digestion, inflation will not be so dangerous, and a trial of half a litre of effervescing water may be permitted after a meal.

Austria.

[FROM OUR OWN CORRESPONDENT.]

VIENNA, October 18th, 1902.

"MAKROCYTASE."

METSCHNIKOFF recently described a hæmolytic substance which he had isolated in the laboratory from an organic substance, the activity whereof in provoking hæmolysis was as potent as any serum yet discovered. To this substance he has given the name of "Makrocytase."

According to Metschnikoff and his followers, more particularly Tarassevitch, this active principle is identical with that found in phagocytes, or makrophagen, from which the new term has been derived, while mikrophagen is applied to the bacteriolytic property of serum obtained from the polynuclear leucocytes. The hæmolytic property of cell extracts was first observed by Shibayama and Klein, who suggested a relationship with the hæmolytic agency found in sera. A later view is promulgated by Korschan and Morganroth, who by recent experiments have proved by the investigation of many organic extracts, that the so-called "makrocytase" is identical with the active principle hæmolysin.

With these experiments before them Donath and Landsteiner, in Weichselbaum's laboratory, attempted to explain by injections of cells the anticomplementary sera. Their object was to discover whether the bactericidal material in the leucocyte extract was of the same nature as that met with in the sera; but the results of their labours were the same as those of Gruber, viz., that the active principles are quite different. They also established an affinity between "makrocytase" and hæmolysin, based on the absence of hæmolytic action in an extract of polynuclear leucocytes when applied to he serum. This "makrocytase" of Metschnikoff comprises both makrophagen and the active principle of polynuclear leucocyte extracts. They also found that the organic extract was active, even when the serum failed; but their temperatures of activity were different. They also found, like Klein, that pancreas extract had a hæmolytic action on the blood corpuscles of a similar animal to the one from which the extract had been obtained. To this peculiarity they think is to be attributed the diversity of results hitherto obtained.

Another point to be observed in their experiments was the fact that the hæmolytic extractive could not be obtained from that part of the organ in which the operations of the phagocytes were most commonly performed; for example, an extract of the liver where the endothelium of capillaries has the property of destroying the red blood corpuscles has been found to be quite inert.

Morgenroth and Korschan are of opinion that the hæmolytic extractive owes its action to a sort of autohæmolysis of the organ, analogous to that of a bactericide. Donath and Landstein hold that Conradi's experiments support this view, since extracts of different organs obtained by pressure when boiled for half an hour still possessed the same hæmolytic action.

HÆMAGLUTINATION.

Landsteiner gave a number of examples taken from his own experiments with blood clots and immunising serums to show how capricious they were in their action. If blood corpuscles are washed out of a clot coagulated either normally or with immune serum, by means of a physiological solution of NaCl, until little or no agglutination takes place, they will, after digesting with the same solution of sodium chloride at a temperature of 50° C, regain an intense agglutinating power. Normal serum agglutinated corpuscles when digested often lose this power with different sorts of blood.

Human milk also contains an agglutinating agent for the blood corpuscles of animals. In some cases the milk will agglutinate the subject's own blood—auto-agglutination.

The Operating Theatres.

MIDDLESEX HOSPITAL.

Cystic Disease of Breast.—Mr. Andrew Clark operated on a woman, æt. 45, who had been admitted complaining of pain and swelling of the left breast. On investigation this proved to be cystic disease involving the greater part of the organ. There was a large definite cyst above the nipple, and two smaller ones below. The patient had stated that she had been in the hospital two years previously, when her other breast had been removed for a similar condition. From that time, as before, she had enjoyed good health, and it was not until the middle of the past summer that she noticed anything wrong with the left breast. The breast was excised in the usual way by a vertical elliptical incision. The edges of the wound were brought together without any tension, and covered with cyanide gauze, which was strapped on, the arm being tied to the side by a broad sling. Mr. Clark said that this was a case in which the diagnosis was obvious, and it was curious that the second breast should assume the same condition as the other which had been removed two years ago. It might be suggested, he said, that in cystic disease it was unnecessary to perform so radical an operation, and that excision of the cyst ought to be enough to cure the affection, yet in the operation on the first breast excision of the cyst was first practised, but another one was found which had not been detected before the first incision; as soon as this was removed two others were discovered, and under these circumstances it was decided to remove the whole of the mamma. In this several smaller cysts were found. The second breast being apparently in a similar condition, the patient had requested that the breast itself might be removed, and he had been quite willing to concur in her desire; the sequel showed how right it was to do so.

Thiersch Grafting after Removal of the Breast.—The same surgeon also had brought into the theatre a woman whose breast he had removed a fortnight before on account of a small scirrhus which occupied the upper segment of the organ, and involved a considerable area of skin, necessitating the removal of so much tissue that it was found impossible to bring the edges together. There was now a healthy granulating wound, about the size of the back of a man's hand. Mr. Clark said that, although in time the granulations would have all skinned over, the little operation of transplanting the epidermis from the arm to the raw surface of the breast not only would expedite cicatrisation, but would produce a firmer and sounder cicatrix. In doing this operation he pointed out that the chief thing to bear in mind was that any weak granulations should be scraped or rubbed off previous to the transference of the new cuticle. There was sometimes, he remarked, a little difficulty in shaving off the graft from the arm, but the parts should be wetted with carbolic lotion, 1 in 40, and a sharp, long amputating knife used, which would be found more convenient than a razor. Mr Clark then proceed to carry out the operation on these lines, and covered the entire granulating surface. The whole of the area of operation was afterwards covered with perforated tin foil, over which gauze was placed; the tin foil, he said, serves to prevent the gauze injuring the delicate grafts when the part is dressed.

GREAT NORTHERN HOSPITAL.

Nephrectomy Eighteen Months after Removal of Calculi.—Mr. Peyton Beale operated on a woman whose history was as follows: In August, 1901, a number of calculi were removed from her left kidney; this operation being described in The Medical Press and Circular "Operating Theatres," August 28th, 1901. Since that time she had remained in fairly good health, but the sinus leading to the diseased kidney had opened up early in the present year. No operation could be performed as she was six months pregnant, and, having a contracted pelvis, she was admitted under Dr. Blacker, who induced labour. After this she suffered a good deal from cystitis, but was not well enough to undergo an operation for nephrectomy, so was sent to a convalescent home. She was re-admitted to the hospital a week before the present time, and an operation was performed as follows: The scar in the left lumbar region was incised for a space of four inches; the right forefinger was then inserted and the edges of what was left of the kidney were without much difficulty separated from the scar; the remains of the kidney were then gradually freed all round, and cautiously pulled up out of the wound. The ureter was ligatured and two ligatures were placed, one on the renal artery and one on the renal veins; the kidney was then removed. There was very little hæmorrhage, and the large cavity was washed out with hot sterile lotion and stuffed with cyanide gauze. The interesting points about the kidney, Mr. Beale said, were: it measured about six inches long by four inches broad, and was found to contain about half a dozen calculi, two of them being as large as broad beans; it was also remarkable how much kidney secreting substance there was; for at the previous operation the kidney appeared to be simply a thin walled sac, quite packed with calculi, all of which at that time had been carefully removed, as previously reported. This, Mr. Beale said, seemed to show that new secreting kidney substance even in considerable quantities could be formed in connection with a kidney which a year previously had been found to be merely a sac, and also that calculi of considerable size could also be produced within a year during the growth of that new kidney substance. Mr. Beale again remarked upon the advisability of dealing with these cases in two operations, for in his experience the operation for removal of the remains of the kidney was in nearly all cases necessary subsequently to the removal of so many calculi: to combine both operations at the same time constituted, he thought, a very severe operation, and one which caused a great amount of shock: moreover, it was a very much more easy matter to remove the remains of a kidney some months after clearing out the calculi. He believed that this had to be done in practically all cases in which at the first operation the kidney was found to resemble a sac full of calculi with but little secreting substance. He had not before met with a case in which so much new secreting substance had been found as in the present one.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 22, 1902.

THE ELIMINATION OF THE DRUNKARD.

Drunkenness, at least in polite society, fortunately now spells disgrace. The inebriate is at last recognised to be an enemy of the State. Alcoholism is a morbid condition threatening human progress. The abuse of alcohol furnishes subject matter for the thoughtful consideration of all sorts and conditions of men. The evil is all too evident; the remedy is yet unfound. Concerning the pathology of drunkenness we know much, but concerning its treatment we differ widely. The inebriate is ever with us. In prehistoric times he was not unknown: according to many observers he still shows no tendency to "die out," and for all we know inebriety will long continue as an evidence of human frailty. And yet constant efforts are being made to "reform" or to "eliminate" this, as many would reckon, "unfit" element. Some time since Mr. Archdall Reid, in his ingenious work on "Alcoholism," sought to indicate what he considered was the only sure "natural" method of eliminating the drunkard. He viewed the "drink craving" as a specific, simple inheritance. Races which have been in possession of alcoholic drinks the longest, he contended, are the least drunken, in consequence of the elimination of those whose "drink craving" was too strong for them. He sought to apply the known facts regarding "predisposition" and "immunity" to this question of drunkenness. Mr. Reid's theories, although ingenious and suggestive, present many weak places, and Mr. Wells, in his valuable essay on "The Problem of the Birth Supply," in the current number of *The Fortnightly*, points out some of the holes. He shows that there is no clear reason for recognising any specific and simple "drink craving" any more than for believing in an inherited tea craving or an inherited morphia craving. Mr. Reid's views disregard the true nature of that which we speak of as "habits." People vary immensely in their power of acquiring habits, and also in the strength and fixity of the habits they acquire. Many causes and many temperaments go to the making of drunkards. Mr. Reid seems to neglect the fact that the nations which have had fermented drinks the longest are those which have been civilised the longest. The passage of a people from a condition of agricultural dispersal to a more organised civilisation means a very extreme change in the conditions of survival, of which the increasing intensity of temptation to alcoholic excess is only one aspect. People who have dwelt for many generations in towns are not only more temperate and less explosive in the grosser indulgences, but more urbane altogether. The great prevalence of drunkenness among the upper classes two centuries ago can hardly have been bred out in the intervening six or seven generations, and Mr. Reid's theory is not strengthened by the fact that drunkenness is on the increase in France. As many will remember, Mr. Reid's suggestion for securing the exit of the "unfit" drunkard was grotesque and ludicrous. Mr. Wells, as we think very rightly, shows that until we possess a far more subtle and thorough analysis of the drunkard's physique and mind than we have at present, we have no justification whatever in artificial intervention to increase whatever eliminatory process may at present be going on in this respect. And even if there be such a specific weakness as "the drink craving," it is possible, as Mr. Wells suggests, that it has a period of maximum intensity, and if that should be only a brief phase in development, as at adolescence, it might turn out to be much more to the advantage of humanity to contrive protective legislation over the dangerous years. Mr. Runciman, in his "Ethics of Drink," shows that, instead of inebriety being a failing of feeble men, it has proved in only too many instances a calamity to noble minds; and in proof thereof we have only to think of the sad experiences of such men as Turner, Cellini, Bulwer Lytton, George Morland, Keats, Charles Lamb, and a host of others who have helped us in the upward climb. Dr. Shadwell, in his recently published work on "Drink, Temperance, and Legislation," says, "The fundamental fact at the bottom of the drink question is the physiological action of alcoholic liquors on the animal organism." This is undoubtedly so, and if we are to arrive at a satisfactory conclusion regarding the pathology of drunkenness, it will be by taking a wide outlook, and probing deeply into the subject after the manner which Mr. Wells has set in his peculiarly attractive study.

UNQUALIFIED MEDICAL PRACTICE.

The startling case of alleged personation of a medical firm by an unqualified man, who is said to have carried on practice in London for some time past, furnishes no little food for reflection. At present the accused labours under the serious charges of perjury and manslaughter, so that we have no intention whatever of discussing his position. At the same time the bare possibility of such an occurrence raises questions of the utmost importance as regards the interests of the public no less than that of the medical profession. The prosecution in the present instance has arisen from the disclosures at a coroner's inquiry, at which the accused received a fee for medical evidence given in the sworn capacity of a registered practitioner. Under existing Acts, as everybody knows, it is not compulsory for duly qualified men to enrol their names on the *Medical Register*. Under this most unsatisfactory arrangement many medical men are qualified but not registered. There are certain disqualifications attached to unregistered practitioners, some of which, there is little doubt, are systematically evaded. Poor-law and other official appointments cannot legally be held by unregistered medical men, and it would repay many unsuccessful candidates for such posts to inquire as to the registration status of the gentleman appointed. It is to be feared that many unregistered medical men are permitted to give evidence in coroners' and other courts, notably magisterial, owing to the laxity of court officials, who could in most instances settle the matter forthwith by a reference to the published *Register*. These points seem to remind us of the fact that only one phase of unqualified practice is affected thereby, namely, those pretenders who are unwise enough to assume the title of doctor. By the unwisdom of the Legislature and the inefficiency of the Medical Acts all other forms of quackery, however gross, fraudulent and harmful, are allowed to go scot free. It is clear that unqualified medical practice constitutes a danger to the public, whether carried on under the guise of a medical title or not, as this simple point summarises the whole position with regard to the future regulation of unqualified medical practice. In law it is a punishable offence to conduct legal business quite apart from the assumption or otherwise on the part of the offender of any legal qualification. A similar provision in medicine would bring the whole range of unqualified practice within the control of the State. If the General Medical Council could be induced to address themselves to the protection of the public and the medical profession they would find the crucial points to be compulsory registration and the extension of punitive powers to all unqualified practitioners. As matters stand the strength of the nation is being sapped and undermined by wholesale quackery of the cruellest and basest possible description, while the members of an honourable profession are forced to the wall by a competition that is disastrous not less to themselves as a class than to the community at large.

CONSUMPTION IN IRELAND.

The population of Ireland has been steadily falling for over fifty years, and yet the death-rate from tuberculous disease of the lungs has gradually risen. The phenomenon is a somewhat strange one; the people are better clad, better housed, and better fed than formerly. We know more of tubercle and its lethal effects, and are better able to ward off the disease and to treat it when it does come. But the increase in the number of cases is alarming; death from tuberculous disease is becoming the most common form of death in the young, adults, and in those of middle life. The explanation lies in the altered mode of life of our people. The same cause is producing the same results in almost every other civilised country. Formerly the greater number of our people dwelt in the country, followed agriculture as an employment, lived in the open air, fed on milk, potatoes and maize, with an occasional dinner of home-cured bacon. The houses, wretched as dwellings, were still well-ventilated. To-day the youth of the country find the road to the nearest large city, and enters a factory or chains himself to an office desk. He marries in the city, and rears his family in surroundings wholly unlike those in which he was reared. His food is changed for the worse, and the draughty hovel purified by Atlantic breezes gave a lung power that his city reared family can never hope to possess. Living in stuffy ill-ventilated rooms, sleeping and eating in them, feeding on tea and bread, they succumb to the tubercle bacillus and propagate it in the dust-dried sputum which permeates the air of every tenement-house in Dublin. The same story comes from Australia, Argentina, Mexico and

Russia. We are aware of the fact that an enlightened enforcement of sanitary laws in large English cities, notably Manchester and Liverpool, has diminished the percentage of the death-rate from consumption in those cities. The sanitary laws enforced are those that are best calculated to restore conditions approaching to life in the country. The fearful mortality of consumption practically dates from the introduction of steam as a motor power. To utilise it economically it became necessary to congregate hands in great, many-storied factories. To check this mortality it is necessary to bring the people away from towns and factories, from filthy tenement houses, musty, disease-laden sleeping-rooms, and ill-ventilated offices, to the pure air of the country. And this has been made possible of accomplishment by the introduction of electricity. In Ballyshannon, Killaloe, Athlone, indeed in every county in Ireland, electricity can be generated by water power and distributed to the homes of the workers without loss. The social revolution which the changes from cities to the country would entail will be great, but some day it must be accomplished.

Notes on Current Topics.

Midwifery Instruction in Obstetrics.

We referred briefly last week to the opinion expressed by a coroner's jury deprecating the practice of sending students to attend midwifery cases, not unfrequently to the detriment of the patient. The practice, we have no hesitation in asserting, is one fraught with risk to the parturient poor without any compensatory advantage in regard to the student. Midwifery is an art which requires to be taught, and no provision is made for the practical instruction of the student beyond the little knowledge he picks up as best he may in attendance on such cases. The proper place for such instruction is the lying-in hospital, and elsewhere than in our own country this is the only place where such instruction is imparted, although preliminary training is given on mannikins at the school, a method of training which is woefully neglected in this country. The difficulty has arisen from the fact that lying-in hospitals in this country are independent institutions, not affiliated to any school of medicine, attendance at which is not compulsory on students, and entails the payment of extra fees which few among them are disposed to pay. No progress can be effected in the direction of remedying an admitted lapsus in medical education until arrangements have been made for the attendance of students in the wards of a lying-in hospital where proper instruction is imparted by the medical officers. Monthly nurses are thus trained systematically, and it is surely vastly more important that medical students should be afforded a similar opportunity for the acquisition of the necessary technical training. When such arrangements have been made it will probably not be difficult to persuade the General Medical Council to make attendance at a lying-in hospital a compulsory feature of the curriculum. At present the Council has difficulty in enforcing even the modicum of instruction actually required.

The Administration of the Vaccination Act.

It has been urged from various quarters that the time has arrived for a transference of the powers in respect of the administration of the Vaccination Act, at present invested in boards of guardians, to some other authority better adapted for the purpose and less amenable to passing gusts of popular feeling. Experience has shown clearly enough that boards of guardians are not to be trusted with the enforcement of this important law, and the mechanism by which pressure can be brought to bear on recalcitrant boards is so complicated, not to say clumsy, that in many parts of the country the law has for years been virtually allowed to fall into abeyance. Before any move can be made in the direction of remedying the present anomalous and unsatisfactory state of affairs, it behoves us to decide in principle what other body would offer a better prospect of the law being enforced, and obviously the duty is one which falls within the domain of the sanitary authority. Vaccination is distinctly a department of preventive medicine, to which prophylactic and sanitary measures also belong, and there is no obvious reason why they should not all be administered by the same officials. This plan would have the merit of removing the administration of the Vaccination Act from local, though not from popular, control, and vaccination is certainly a measure of imperial rather than local concern. The only alternative which suggests itself is the appointment of a special administrative officer holding his authority directly from the Local Government Board, who would superintend public vaccinations and initiate prosecutions when required. The objection to the latter alternative is that it would probably entail additional expense, but, after all, any reasonable increase of expenditure would be more than compensated by the more uniform enforcement of the operation.

Potassium Chlorate in Habitual Death of the Fœtus.

The internal administration of chlorate of potassium, which was first recommended by Sir James Y. Simpson in cases of habitual death of the fœtus in the later months of pregnancy, in non-syphilitic cases, has found another advocate in the person of Dr. Robert Jardine, whose experience and opinion of the value of the drug are favourable to its use. Among the cases he relates one was of special interest. Dr. Jardine attended a patient in her fifth confinement within six years of her first one. Except that the labour was a lingering one, there was nothing abnormal about it; the child was healthy, and is still alive. Within a year she had a miscarriage. Within twelve months she had a premature labour with a putrid fœtus, and narrowly escaped death from sepsis. When she next became pregnant Dr. Jardine put her upon potassium chlorate and she went to full time. The child was quite healthy and is still alive. In her next pregnancy she did not take the chlorate, and the result was a miscarriage. She soon became pregnant again, and on taking the chlorate she went to full time and was delivered of a healthy child, though she suffered during labour from hæmorrhage and what was apparently a pulmonary embolism. In her next pregnancy the patient took the chlorate again and went to full time. Since then, she has had at least two miscarriages when she was not taking the chlorate. Dr. Jardine does not offer any explanation as to the manner in which the drug acts, save to say that he considers it to have a beneficial effect on the endometrium. He dissents from Sir J. Y. Simpson's explanation that it provides more oxygen for a damaged placenta to convey to the fœtal circulation. Whatever may be the *rationale* of the action of the drug, if it produces the effect claimed for it, and if, as he asserts, its use is free from danger, it is certainly worthy of a trial in obviously non-syphilitic cases. The usual treatment for this class of case, *i.e.*, the induction of abortion, has yielded such unsatisfactory results that any more promising line of treatment will be welcomed.

The Relation of Trees to Cancer.

A French medical man, M. Dor, has recently made an interesting report on the relations of cancer to locality, occupation, and vegetation in France, a work in which he has been helped by subsidiary reports received from other medical men throughout the country. His observations and those of his medical friends are both interesting from a clinical point of view and of great importance as bearing on the question of causation. Of the many reports we can do no more than refer to one of seventy-three cases of cancer in the practice of one physician, and of all these sixty-seven occurred in isolated farmhouses on the borders of woods, and six only occurred in villages. In the country districts the inhabitants look on the disease as of vegetable origin, and believe that it is propagated in a manner similar to that in which actinomycetes is conveyed by fodder; and in support of this popular view is the fact of its frequency among those whose occupation necessitates their living in the vicinity of forests. M. Dor draws attention to the pathological growths of the bark of the fir tree, and points out how closely they simulate malignant growths in the human being, and the effects of excision in the vegetable and animal kingdom. Trees suffering from the growth have been found in the vicinity of cases in the human being, and in one case the growth of an epithelioma followed on the blow of a firwood stick on the lip. M. Fiessinger asks: May not these vegetable parasites of tree cancer be analogous to the cancer parasite of M. Metschnikoff? As might be expected, the revival of this theory by M. Dor, for it is not altogether a new one, has excited interest afresh on the subject, and Bra, Pouchet, Chevalier, and others have been experimenting with mammals and trees, inoculating from the vegetable to the animal kingdom, and from the animal to the vegetable, with, they claim, success. The experiments cannot be other than helpful in the study of the question; nevertheless, we are unable to accept them as proving that cancer is of vegetable origin. In following the results of their laboratory work, and in drawing conclusions from the facts submitted to them, we fear the distinguished pathologists overlooked the fact than cancer is essentially a disease of civilised life. It is practically unknown among savages. The arboreal pigmies of Equatorial Africa know it not; the North American Indian is free from it; the Canadian woodman, the Norwegian pine-feller, the mahogany-cutters of Honduras, the rubber-tappers of the upper reaches of the Congo, the hacienda dwellers of the La Plata are practically exempt from it. Neither Humboldt nor Livingstone record a case, though these travellers travelled the most wooded countries of the world. Of course, it may be fairly said that wild trees are not so subject to disease as cultivated ones, and, further, that the timber of tropical forests is not so prone to the disease as are the cultivated trees on the limits of the temperate zone. We acknowledge this, but still we doubt that the theory of a vegetable origin will prove to be tenable.

Bearding the Barber.

Mere man, when stationed beneath the blade of the barber, feels himself the victim of circumstances. As long as Nature strives to assert her right to maintain hirsute appendages and fashion denies their continuance, the barber will live and flourish. When placed in the operating chair the time for argument, explanation, and restriction is passed. And yet the profession of barber is badly in need of regulation and direction. It has been shown conclusively that the apparatus of the barber is capable of conveying disease, and in many instances the barber himself, as well as his shop, stands in need of reform as regards sanitary conditions. We venture to think that public opinion should be educated on this matter. In America the subject has been dealt with. The San Francisco Board of Health have recently adopted severe restrictions and regulations for the sanitary control of barbers' shops. The hygienic reasonableness of many of the rules cannot be denied. Absolute cleanliness must be maintained. Mugs and shaving brushes are to be sterilised by immersion in boiling water or formalin solution. Razors are to be wiped with 95 per cent. alcohol. "Sanitary brushes" must be employed, and are to be sterilised by being placed in boiling water or dipping in formalin solution. Combs are to be treated in a like manner. Razor strops are to be kept clean. A clean towel must be provided for every customer. The prevalent custom of blowing away hairs must be discarded. Attention must be devoted to the cleansing of the operator's hands, and particularly finger nails. Powder puffs are to be prohibited, and the use of sponges discarded. The wash-basins, pipes, and drains must be in perfect sanitary condition. All instruments must be kept absolutely clean, and, where possible, disinfected. Barbers must never attempt to treat skin diseases. We could wish that like regulations could be enforced in this country. Many of the barbers' shops which we have visited in London and various parts of the country seem to be in the hands of foreigners whose ideas regarding cleanliness and hygienic requirements are conspicuous by their absence.

Malta Fever.

An item of clinical medicine of Oriental—or quasi-Oriental—origin consists in the recent recognition of the wide-spread distribution of an undulating type of fever—usually known as Malta fever—the notching of the temperature chart in which is not sufficiently deep to entitle it to the descriptive epithet of "intermittent." In the United States, isolated cases have from time to time been recognised during the past few years; and, since the development of the policy of Imperialism, with its collateral complications and their various sequelæ, a greater proportional number have appeared in the persons of soldiers recently returned from the Philippine Islands. It is an interesting and remarkable fact that in India the existence of this disease, whether of imported origin or of sporadic indigenous growth, has never been established, although ample and favourable opportunities for its introduction have undeniably existed.

The Medical Profession and the Army.

The address delivered last week by Sir William Taylor, Director-General of the Army Medical Service, at University College, directs attention to various points of interest in connection with the service. He admits that the medical department is much undermanned, and we gather that he holds the view that its members are never likely to be in a position to adequately fulfil the duties incumbent upon them under the strain of a great war. On the other hand, the number of medical men who study in time of peace the problems that have to be considered in time of war is small, so that there exists no real reserve available for emergencies. One way out of the difficulty, he suggests, would be for each medical school, or combination of schools, to equip, maintain, and administer units in time of peace which could proceed to the field in a state of complete efficiency. The idea is ingenious, but we doubt its practicability. Medical students have enough to do as it is in preparing for examinations, and once they have qualified, their energies are likely to be absorbed in the "struggle for life." We do not see any opportunity for them to acquire the technical knowledge which is to fit them for medical service in the Army in the absence of any intention on their part of taking up the career as an objective. Would it not be practicable for the State to control the recruitment of surgeons to Volunteer and Militia regiments under conditions which would secure efficiency and render their services available in case of need. Another alternative would be to distribute civilian appointments in connection with the Army exclusively to young practitioners who would undertake to respond to the call in the event of need. The matter must be dealt with on a purely business basis. Patriotism may, perhaps, be trusted to a certain extent in times of stress, but it is a negligible quantity in the piping times of peace when men's minds are concentrated on matters afferent to their immediate needs.

Ignorance No Excuse.

Lest the Italian manufacturers and vendors of ice creams and similar alimentary delicacies, many of whom are passably ignorant of the English language, should fail to become acquainted with the new sanitary regulations which bear on their calling, Dr. Collingridge, Medical Officer of Health for the City of London, has caused notices in the Italian language to be printed, calling attention to the new requirements which come into force on November 1st. In spite of this thoughtful act we confidently anticipate that the sanitary police will have plenty of work on hand in persuading them, with the help of a magistrate, to conform to these very necessary regulations.

Carbon Monoxide Asphyxia.

In view of the extremely small proportion of carbon monoxide required to cause death—one part in two thousand—it is surprising that disasters from this cause are not of more frequent occurrence than they are. In this country, where the use of movable stoves is almost unknown, such accidents are almost invariably due to imperfect provision for the escape of the products of combustion generated by apparatus for heating water for baths. The careless way in which floors are laid and the inaccurate fitting of sash windows, as a rule, allow of such free ventilation that under ordinary circumstances nothing more than temporary inconvenience is caused by leakage. In France the impermeable parquet-floor and the hermetic sealing of windows and doors render even small quantities of this deadly gas highly lethal—witness the regrettable death of M. Zola. The danger is nevertheless omnipresent. An accidental blockage of the chimney by soot or fallen bricks may prevent the escape of the products of combustion, or these may percolate through fissures in the party-wall and find their way into adjacent bedrooms. Certain winds, again, may, and often do, determine down currents of air in the chimney, though in countries where coal is cheap attention is usually attracted by an inrush of irritating smoke. Lastly, people are but too apt to forget that a fire requires an adequate supply of air, and if all inlets are carefully blocked to keep out the cold air a certain proportion of the contaminated air which ought normally to go up the chimney is thrown back into the room. Even when not fatal the habitual inhalation of even minute quantities of this gas is productive of grave mischief, especially in the production of intense anæmia not amenable to the usual medicinal measures, since it is due to the virtual destruction of large numbers of red corpuscles which cannot readily be regenerated or replaced.

The Polished Floor.

By slow degrees it may be hoped that the conclusions of sanitary science may be applied to the environment of dwelling-houses. One of the great advances in modern times has been in the adoption of impermeable surfaces. The ordinary wooden floor is a snare and an abomination, and when the boards are left bare and washed from time to time with soap and water it rapidly becomes a danger to health. The boarding rots and its interstices fill with decomposable and decomposing matter, while the emanations given off during the process of drying lays the seed of many a lung trouble, especially among children. On the other hand, when the boards are carpeted the dust that lodges thereon, even in the best-kept household, is raised in invisible clouds at every footstep. Dust, carpets, and disease are inseparably associated in the mind of the modern sanitarian. A far better plan is to have a floor prepared either with a varnish stain or with a wax polish. The surface is then readily swept or rubbed down with a duster, and can be protected, if necessary, by carefully disposed linoleum mats; or by a few small, closely-woven rugs or mats. In the bedroom the polished floor is *facile princeps.*

Short Service in the Navy Medical Service.

We have received a copy of the recently-established regulations for the admission of surgeons for temporary service in the Royal Navy, according to which duly qualified men not over forty years of age, in good health, will be admitted to the Service for a period of six months certain and a qualified liability to serve for five years. At any time after the six months' service, however, they may be given two months' notice (or its equivalent in pay) that their services are no longer required. The pay will be at the rate of 22s. a day, or £410 a year, with half-pay for sickness, and leave at the rate of 10s. a day. They will be awarded pensions for wounds, and pensions and gratuities will be paid to widows, young children, widowed mothers, and orphan sisters of surgeons killed or wounded *in action*, but, of course, preference will be given to unmarried candidates. Injury, disease, or death occurring in the ordinary course of events will not entitle to either pension or gratuity. Provision is made for voluntary resignation, subject to the convenience of the Service, but in that case the two months' pay on discharge will not be accorded. The adoption of the short-service system in the Navy is tantamount to an admission of difficulty in recruiting the medical staff, and with one or two modifications may prove successful in attaining the object in view. It is, however, a drawback that those accepting temporary employment are liable to discharge at any period after the initial six months, with two months' pay by way of solatium, especially as no provision is made for their discharge at a home station. There is also the fact that if the officer contracts disease or injury in the ordinary duties of his post, no matter under what circumstances, he will have no claim to a pension or gratuity. Moreover, no facilities are offered for a surgeon on temporary engagement to join the regular staff should he be so minded. The system appears worthy of trial, but we strongly recommend intending candidates to weigh the advantages and disadvantages well before taking the leap.

Adenoids and Nocturnal Incontinence.

The classic treatises on diseases of childhood make little or no mention of the part played by adenoids in causing nocturnal incontinence of urine in children. Henoch, in the long list of pathological conditions that he gives of exciting causes does not mention them. But he has the courage to confess that "Unfortunately, you will not in the majority of cases succeed in finding any of the abnormal conditions mentioned, nor even if they are found, will you manage to cure the enuresis by treating them." The correlation between adenoids and nocturnal incontinence attracted the attention of Major in 1885, and Baumgarten soon afterwards cured two intractable cases by the removal of adenoids. But these cases were too few to attract notice, and it was not until Freyberger published his eighty-six cases, and Fischer published his investigations on the effects of removal of adenoids in children, in which he found that in forty-three cases the operation caused the cessation of the incontinence, in seventy-three cases greatly benefited the patients, and in five produced no effect, that Etievant's theory that the deficient oxidation of the blood in children, whether brought about by adenoids or other nasal obstructions, produced anæmia, headache, nightmare, and by a reflex action nocturnal incontinence. The urine in such cases is passed in a stream, and only during sleep, or when the child is half awake. Here, in fact, there seems to be a reflex irritation of the detruser, the action of which is all the stronger because the influence of the will on the sphincter is in abeyance during sleep. Fischer is confirmed in his opinion that the exciting cause of the incontinence is due to insufficient aeration of the blood producing nightmare which affects the renal secretion and the bladder, by noticing that in some cases the removal of the adenoids produced no good results, the nasal respiratory tract being in part occluded by polypoids of the inferior turbinates, the removal of which was immediately followed by a cessation of the nocturnal incontinence. The effect does not, however, always follow so quickly on the operation; in Etievant's cases fifteen days elapsed before the desired result was obtained. In this, as in most cases in which the art of medicine has advanced, the progress resulted from accurate observation of the phenomena of the disease, and corrected induction from the observed facts. How many physicians must have noticed children breathing through the mouth during sleep before Major discovered the correlation between imperfect oxydation of the blood and nocturnal incontinence.

A Case of Dercum's Disease.

An additional case of Dercum's disease, or *adiposis dolorosa*, has been added to the twenty-five which, according to Professor Dercum, have been described up to the present time. This case has been recorded by Dr. Bochroch, at the Philadelphia Medical Association. The patient, who was aged fifty-six and married, had increased in weight from 100 lbs. to 236 lbs. She presented the four cardinal symptoms which have been noted by Vitaut in this condition—viz., enlargements in various parts of the body due to the deposit of fat, pain, neurasthenia, and various psychic symptoms, which, in her case, assumed the form of impairment of memory and mental hebetude. There was a fatty deposit the size of an egg under the chin, masses of pendulous putty-like fat near the axillary regions, and over the hips and abdominal region the fat hung in folds. The slightest touch on any of these areas caused pain. Dr. Bochroch is inclined to consider that in all probability there are many cases of this condition which escape recognition, as the case he records was under observation in a public clinic for over a year without being recognised. The pathology of Dercum's disease is still quite obscure, and the present case does not appear to have given any assistance towards its elucidation. Burney Yeo, writing in the "Encyclopædia Medica," suggests that the thyroid gland plays some mysterious part in its causation, but does not draw any conclusion as to treatment.

The New President of the Royal College of Physicians of Ireland.

The election of Professor A. V. Macan to the Presidency of the Royal College of Physicians of Ireland will be hailed with satisfaction throughout the obstetrical and gynæcological world in general, of which he has been for many years one of the most prominent members. Professor Macan graduated in the University of Dublin in 1868. In 1877 he was elected a Fellow of the College, of which he is now the titular head. In 1882 he became Master of the well-known Rotunda Hospital, where he firmly established his reputation as one of the foremost gynæcologists of the day. On his leaving the Rotunda Hospital he was appointed to the chair of King's Professor of Midwifery in the School of Physic of Trinity College, Dublin, a post which he still holds. He is an ex-President of the British Gynæcological Society and of the Obstetrical Section of the Academy of Medicine in Ireland, a post to which he has been twice elected, and was also honorary president of the Obstetrical Section of the International Medical Congress held at Berlin in 1890. Though not a prolific writer, the new President has contributed many communications of extreme importance to medical literature, and was notably responsible for the introduction into these countries of rational ideas on the subjects of uterine displacements. It is now some years since the post of president of the college was held by an obstetrician and gynæcologist, although many such have been conspicuous presidents in the past. To their list the name of the newly-elected president is a worthy addition, and one on which we can congratulate the college.

The High-Frequency Treatment of Cancer.

Although the ultimate origin of cancer has not yet been brought within the grasp of medical science there are nevertheless signs of the times that are most gratifying in their nature. Electricity appears to be advancing its claims to a considerable extent as a valuable remedial or even curative agency. The older methods of electrical treatment had been practically discarded in the treatment of malignant disease when the Röntgen rays and the high-frequency current put in an appearance on the field of action. Results from both methods have been so encouraging as to justify the highest expectation with regard to their future application in cancer. The Röntgen rays act chiefly on surface growths, and are especially valuable in post-operative recurrent nodules. The high-frequency current is most suitable for cancer of bladder, rectum, uterus, throat and nasal cavity. In suitable cases it restores appetite and sleep, while the patient puts on flesh, while the growth either diminishes in size or altogether disappears. Where no further operation can be attempted, or where the case is for other reasons inoperable, the high frequency current deserves a trial.

The Contagiousness of Pneumonia.

Although pneumonia is one of the oldest known diseases, there are many points in its etiology which remain obscure. The explanation may possibly be found in the fact that it is not a distinct morbid entity but is merely a collateral consequence or a sequel of many complex pathological states. It is very generally believed to owe its origin to a chill; but, although this may be one factor in its production, it cannot be the only, or even the principal, one. Nor can the pneumococcus be the essential factor in all forms of pneumonia, since its presence cannot be demonstrated. Then, too, there is a particular variety of the disease, which appears to be readily capable of transmission to persons exposed to infection, a quality which is by no means characteristic of all cases in which the pneumococcus is found. With the progress of knowledge it may ultimately be possible to differentiate the various forms of pneumonia one from another by the aid of bacteriology, although clinically they are indistinguishable. In this respect it is highly desirable to distinguish between active and passive pneumonia, the first being secondary to some deeply-seated organic disturbance; while the latter is, in the great majority of instances, probably the direct outcome of infection.

Local Bodies and the Adulteration Acts.

THE annual loss from food adulteration inflicted on the population of the United Kingdom must annually reach an enormous aggregate sum. In the Metropolis alone, upon the estimate of the Local Government Board, citizens pay something like £30,000 a year for the purchase of water supplied to them as an adulterant of milk. During the year 1901, out of 7,067 samples examined, no less than 1,072 were found to have been tampered with. Of the samples thus analysed and condemned, 50 were both watered and skimmed, 618 contained added water, and the remaining 384 showed abstraction of fat. As to butter, the adulteration rate has increased in London and the twenty next largest towns, so that it now stands at 12·2 per cent. The importance of enforcing fairly high standards of purity in the case of milk and butter need hardly be insisted upon. In spite of the obvious and elementary nature of that proposition, however, there can be no doubt that the average local authority falls miserably short of its duty in the matter. More than that, it is safe to assert that the whole of the wide field covered by the Adulteration of Food and Drugs Acts is almost equally neglected. The usual plan of taking a sample here and there at random, and of embodying the results in a column at the end of the annual report of the Medical Officer of Health of the district certainly does not ensure an efficient administration of the Acts. It is more than likely that a systematic examination of the shops in a single street would in many cases reveal an infinitely greater number of flagrant food adulterations than those detected in a year from the whole parish by the food inspectors. By the way, it is noteworthy that we hear little or nothing nowadays about the adulteration of beer.

Governmental Cruelty to Animals.

THE humaner spirit of modern times forms one of the favourite topics of newspaper writers and of social reformers. Its influence can be traced in the powerful societies founded for the prevention of cruelty to the lower animals. Its spirit is also embodied in the special laws that have been added to the statute book of the United Kingdom within the memory of the present generation. Indeed, so aggressive has been its mission that it has not hesitated to invade the realms of scientific investigation and to impose restrictions upon experimental research. So long as its demands in the last-mentioned direction are not prohibitive to the reasonable advance of scientific study by means of experimentation they will be readily accepted by the medical profession, which is composed of a body of essentially humane and intelligent men. Recent events in connection with the South African war, however, suggest the question whether the Watch Committee would not do well to extend their criticism to the War Office. *Quis costodiet ipsos custodes?* There can be no doubt that many of the horses sent out to the Cape for the purposes of the campaign were in such a state as to render their employment a matter of refined cruelty. Those wretched animals that have survived the campaign are now apparently being sold by Government. At any rate, a contractor who was summoned to the Guildhall for cruelty to a horse, by working it in an unfit state, declared that the animal had come from the front and he had purchased it from the authorities. The horse was old, decrepit, and had sores on its back. Defendant pointed out the absurdity of the police prosecuting him for working a horse bought under such circumstances, and the magistrate wisely dismissed the case.

Small-pox and Revaccination.

A CIRCULAR has been distributed by the Health Department of the City of London calling the attention of employers and others to the desirability of insisting on the revaccination of *employés* in view of the probability of a recrudescence of the epidemic of small-pox during the coming winter. In order to avoid the rush which takes place under such circumstances it would be well for employers to adopt the example of many large companies in requiring all new hands to furnish evidence of revaccination or to insist on their being revaccinated. In this way the administrative dislocation which results from the revaccination of large numbers of persons engaged by a particular firm can be avoided. We note with pleasure that the City of London sets an excellent example in this, as in many other prophylactic sanitary measures, an example which might advantageously be followed by the municipalities of other large cities in the kingdom.

The Exploitation of the Sick.

WITH commendable pertinacity *Truth* continues to call public attention to the latitude permitted to purveyors of nostrums and useless appliances in their attempts to delude the public, notably to the notorious Drouet Institute and the Viavi remedies. Well may our contemporary express wonder that such persons can with impunity circulate preposterous and utterly untruthful claims under circumstances which in any other walk of life would expose them to a charge of endeavouring to obtain money by false pretences. These are only two of an immense number of products which are bolstered up by unequivocally mendacious statements, but we fear *Truth's* appeal to "the governing bodies of the medical profession" to get the law put on a more rational basis is likely to remain without an echo partly because the governing bodies are notoriously unable to bring any influence to bear on Parliament with this object in view, and partly, no doubt, because the matter is one in which they feel no direct interest.

DR. BROWN, of Preston, had a narrow escape from serious injury one day last week. His horse bolted, and he sustained a severe shaking in his attempt to get out of the carriage, but he fortunately escaped serious injury.

A Revocable Engagement.

A monthly nurse recently brought an action in the Merthyr Tydvil County Court for the recovery of a fee under an engagement to attend a patient during her confinement. She was engaged in May for August, but in June she received notice that her services would not be required. The Judge held that the claim could not be maintained, and gave a verdict accordingly. This decision is in accord with those rendered elsewhere when medical men have sought to recover fees under similar circumstances, but it presses even more hardly on the nurse than on the practitioner. A medical man would not be precluded from accepting any number of other engagements for a given month, whereas a nurse would necessarily have to decline engagements for dates already arranged for. The only way out of the difficulty, apparently, would be for the nurse to insist on a written engagement stipulating the exact conditions under which it might be determined.

PERSONAL.

Sir Victor Horsley is to distribute the prizes at the Faculty of Medicine of University College, Bristol.

Dr. J. Hill Abram has been appointed physician to the Liverpool Royal Infirmary, vice Dr. Caton, resigned.

Sir Thomas Barlow will distribute the prizes to the successful students at the National Dental Hospital on the 29th inst.

Surgeon-Lieutenant-Colonel Hayward Reader has been selected to fill the office of Senior Medical Officer in Lord Kitchener's command.

Dr. Phillips, of Wellington, Herts, has been presented by the inhabitants of the parish with a valuable microscope, and sundry other useful articles, on the occasion of his removing to Halesowen.

Mr. Alban Doran, F.R.C.S., will deliver the Harveian Lectures at the Harveian Society of London, on Thursdays, November 6th, 13th, and 20th, at 8.30 p.m. Subject: "Uterine Fibroids; considered from a Clinical and Surgical Standpoint." These lectures are open to all medical men.

The Lord Lieutenant of Ireland has made the following further appointments to his household:—Physician-in-Ordinary, Dr. Walter Smith, ex-President of the Royal College of Physicians; Surgeon-in-Ordinary, Dr. Edward H. Bennett, ex-President of the Royal College of Surgeons; Surgeon to Household, Mr. J. Lentaigne; Surgeon Oculist-in-Ordinary, Mr. J. B. Story; Surgeon Dentist-in-Ordinary, Mr. H. Gregg Sherlock.

Death from Hydrophobia.

A death from hydrophobia is reported from Glasgow, the victim being a girl, nine years of age, who had been bitten by a young collie dog a few days previously.

The Battle of the Clubs.

It has been resolved by the members and honorary subscribers of the Grantham and Belvoir Rural District Medical Club to submit the dispute between themselves and their medical officers to arbitration at the hands of the Duke of Rutland. It remains to be seen whether this method of terminating the dispute will commend itself to the latter.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

SCOTLAND.

[from our own correspondent.]

REOPENING OF THE UNIVERSITIES AND MEDICAL SCHOOLS.

Edinburgh.—The various medical classes in the University and extra-mural school opened for the session on the 14th inst. without any special ceremony. It has never been customary to inaugurate the academic year by a general address to the undergraduates, and even the custom of individual teachers giving introductory lectures on general topics to their own classes is each year falling more and more into desuetude. Most prefer, and wisely so, to plunge at once into the work of the course. The principal change from previous years, so far as the medical faculty is concerned, is the opening of the John Usher Institute for Public Health. With the opening of the session comes the Rectorial election, Sir Robert Finlay being the Unionist, and Sir Edward Grey the Liberal candidate. The usual election literature is abundant, and the usual raiding of the Liberal rooms by the Conservatives, or *vice versa*, is taking place. Lord Tweedmouth addressed a meeting in support of Sir Edward Grey's candidature on Friday evening.

St. Andrews.—The winter session was formally opened on the 15th by an address from Principal Donaldson, in the United College Hall, additional interest being lent to the proceedings by the installation of Professor Kay to the Hebrew Chair, and Professor Edgar to that of Education. The subject of Principal Donaldson's address was the "Relation of Scottish Universities to State Control." He showed that historically the Scottish theory had been that the State was immediately responsible for the Universities, and was bound to maintain them in full efficiency whatever might be the cost. This was the practice till 1889, when a clause was inserted in the Universities Act to the effect that the sum of £42,300 annually shall be deemed in full discharge of all past and present claims of the Universities. This clause was of purely English origin, and belonged to the range of English ideas. In spite of this final settlement with the Universities, Parliament passed a measure in 1892, granting an annual subsidy of £30,000. The Carnegie Trust, he said, had done great good to the University of St. Andrews, and had come to its aid at a critical time.

Glasgow.—The inaugural address for the opening of the winter session was delivered by Professor Latta, the new holder of the chair of Logic in the University. The subject of the address was "The Old Mysticism and the New Pluralism."

The winter session at Anderson's College Medical School was opened by Dr. Smart, Professor of Political Economy, Glasgow University. He dealt with the profession as opposed to trades, pointing out that in both services were sold for money, but that the characteristic of the tradesman was that he first looked at his wage, while the professional man first looked at the service.

The classes at St. Mungo's College were opened by Professor Hugh Galt, by an address on methods of study.

Glasgow University Rectorial Election.—Considerable excitement prevails at present among the students as to the result of the election for Lord Rector, in succession to Lord Rosebery, who retires. The election takes place next Saturday, the 25th inst., and both parties—those in favour of Mr. Morley, and those for Mr. Wyndham—are equally sanguine of success, as is usually the case. The rooms of the opposing parties are situated in Gibson Street, near the University, and in the evenings a large number of police have been in attendance, as occasionally rather disagreeable, although somewhat harmless, piecemeal battles occur. When the students confine themselves to the piecemeal, the police do not interfere. The exuberant spirits of the students are apt to be shown, however, in a more destructive and dangerous form, such as the smashing of doors and furniture in their rooms. So far nothing very serious has happened.

Glasgow Southern Medical Society.—The annual dinner of this Society was held on Thursday evening, the 16th inst., in the St. Enoch's Station Hotel. Between fifty and sixty gentlemen sat down to dinner, among whom were Professor Stockman, Dr. Haldane, Bridge of Allan; Dr. Cluckie, Greenock; Drs. Forrest, Somerville, Erskine, Connal, Robertson, Carrol, Weir, Carr, Dunning, Stirling, Shaw, Young, and others. The president, Dr. D. McGillvray, occupied the chair. The croupiers were Dr. T. Richmond and Dr. J. Fraser Orr. The chairman, after proposing the usual loyal toasts, gave the toast of "Our Society." He gave an interesting sketch of the Society from its foundation in 1884 down to the present time, with a membership of 200 to 300. Other toasts followed, and the evening was enlivened by music.

An Attack on a Medical Man.—At the Sheriff Court a few days ago a young man was sent to prison for a very unusual attack some time ago on a medical man resident in the northern district of the city when he was robbed of his gold watch and chain. The doctor was incapacitated for work for some time after. He wears several rings on his fingers, and whether this display had anything to do with the attack it is not easy to say. It was the prisoner's first offence.

Aberdeen.—The rectorial election for the University has been fixed for Thursday, October 30th, the Right Hon. Mr. Asquith, M.P., and the Right Hon. Mr. Ritchie, Chancellor of the Exchequer, having been nominated as candidates for the post vacated by Lord Strathcona.

MANCHESTER.

[from our own correspondent.]

The Royal Infirmary Dispute.—During recent years we have frequently had to record the useless discussions of Manchestere's citizens regarding its effete infirmary. Hitherto the board has been stubborn in sticking to its "do nothing" policy, but at last this ancient and autocratic body has been compelled to yield to the pressure of public opinion, and fortunately the majority of its members have resigned. The board's extremity has proved the opportunity for progressive trustees and enlightened citizens. At a special meeting, held on October 16th, the Earl of Derby presiding, the following resolution was adopted:—"That the Trustees confirm the policy that there shall be no rebuilding of the Infirmary on the Piccadilly site; that that building and site be disposed of on terms to be approved by the Trustees and sanctioned by the Charity Commissioners; and that a new Infirmary, on plans to be approved by the Trustees, be built at Stanley Grove without delay, unless a better site can be obtained."

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

THE EVIDENCE FOR HETEROGENESIS.

To the Editor of The Medical Press and Circular.

Sir,—What the reviewer of Part II. of my "Studies in Heterogenesis" says, on p. 394 of your last issue (October 8th), of one of the seven subjects of which it treats is calculated to give your readers an entirely erroneous view as to the nature of the evidence presented by me.

His "few control experiments to test the validity of the author's conclusions" in regard to the particular subject referred to are, I submit, as inconclusive as they are irrelevant. I did not question the existence of Monads in hay infusions. I affirmed that Monads of full size can be seen to develop from Zooglœa masses, and your reviewer adduces no evidence to show that any Zooglœa appeared in his inoculated hay infusion—whose constitution had been altered by previous boiling on four successive days. The fact, therefore, that no Monads subsequently showed themselves in this infusion is one which does not surprise me, and it in no way controverts or weakens any statement of mine.

From what your reviewer says no one would dream that the whole section to which he refers is one which has absolutely nothing to do with "pure cultures," but is concerned with the development of innumerable patches of Zooglœa throughout the pellicle that forms on hay infusion, together with the study of the microscopical changes and transformations which they subsequently undergo. I have shown that these "areas" of Zooglœa, varying much in size and shape, exhibit progressive segmentations, with the result that the ultimate units derived therefrom appear either as Fungus germs from which Mycelia develop, or as Amœboid Corpuscles which unfold into actual Amœbæ or into flagellate Monads. Then, again, I have similarly traced, and represented by photomicrographs, the stages by which some Ciliated Infusoria (Kolpodæ) are developed from other Zooglœa masses occurring in the substance of the pellicle. The whole of this section is, in fact, based upon microscopical evidence. It has confessedly nothing to do with "pure cultures," and also rests upon evidence wholly independent of "the ubiquity of Monads and fungus germs."

Who of your readers would ever dream that this was the state of things, having regard to what your reviewer says? When he gets microscopical evidence he ignores it. On the other hand, when such details are less necessary he avers that the problems are "problems of cell morphology and must be studied as such."

One of the subjects to which this last dictum refers is the derivation of Ciliated Infusoria from the segmentation of large encysted Amœbæ of an orange-red colour; and another is the transformation of the entire contents of one of the largest of Rotifer eggs into a great Ciliated Infusorium (Otostoma) by keeping it under certain unnatural conditions for from three to four days. This Ciliate is so rare that it has only once been recorded as having been found in this country, and with one single exception I have only found specimens in, emerging from, or with, the eggs of this particular Rotifer (Hydatina) when they have been placed under certain experimental conditions. Yet I have taken hundreds of this very rare Ciliate from my experimental pots, and always as full-sized organisms about one three-hundredth of an inch in length. I have shown them as such within and emerging from the Rotifer eggs, and I have also represented some of the histological stages by which the eggs have become transformed into the Ciliates—changes wholly unlike any of those even occurring during the normal development of the Hydatina egg.

The proof that this transformation will occur under certain conditions is, as I maintain, absolute; and this is the all-important matter. The question of the precise and detailed histological stages by which the transformation is brought about is quite another and an altogether subordinate matter. Yet my critics demand a "full and definite histological proof of the transformation" before they will entertain the question and examine the abundant evidence already at hand.

Then, again, I have shown in Part I., the stages by which specimens of Amœbæ and Actinophrys have been developed from the endochrome of Confervoid cells; and I have shown the different stages by which other Rotifer eggs undergo simultaneous segmentation throughout their whole mass, the products sometimes developing into Amœbæ, sometimes into Peranemata, and at others into Monads. The criticism in regard to these observations was different. I was told they were unsatisfactory because I had not isolated the resultant forms and studied their future history. But why was this needful? It could only be so on the assumption that in the cases just referred to we had not to do with instances of Heterogenesis, and that the resultant forms might be phases in the life-history of the organisms from which they had been derived. I would ask, however, who supposes that any ordinary Amœba or Actinophrys, for such they were, would develop into a Conferva; or that the Amœbæ, Peranemata or Monads derived from the segmentation of the Rotifer eggs could be stages in the normal life-history of any Rotifer? And if neither of these things was in the least probable why was it necessary for me to have followed their subsequent life history?

Most of these objections are the result of mere superficial and piecemeal criticism; while there is an utter absence of any broad and comprehensive estimate of the value of the evidence adduced, either as testifying to the occurrence of Heterogenesis or of some rival interpretation.

I am, of course, well aware of the weight of preconception opposed to my views, and that I can only expect slowly and with difficulty to gain converts. My diligent search for some years shows me that the evidence of the occurrence of such processes is common and widespread enough, but on account of the preconceptions above referred to it is never looked for by others. Moreover, if the views of my critics as to the way in which the evidence should be sought were adopted, any evidence as to the existence of Heterogenesis would, I believe, stand little chance of being ever forthcoming.

I maintain that isolation, continuous observation, and aseptic conditions are in the majority of cases alike impossible. In seeking for evidence of Heterogenesis we have to study the changes in animal or vegetal organisms when dying, while still in, or not long removed from, their ordinary surroundings; or we have deliberately to place such organisms under certain unnatural conditions, and observe from time to time the changes which have occurred. And then, just as the geologist does in pursuing his studies, we have to put the most reasonable construction—the one which accords best with all the facts—upon the appearances discovered. We have, of course, always to bear in mind, as possible explanations of what we see, the chances of infection by known or hitherto unknown processes, as well as the possibility of the existence of previously unknown phases in the life-history of the parent forms under observation.

These methods are undoubtedly much less conclusive than those of the bacteriologist, or those by which the normal life-history of many animal and vegetal forms has been worked out, but they are the best that are available. The difficulty of isolating the objects which I study is often extreme, if not insuperable; while the placing them under conditions which would admit of anything approaching continuous observation only too often puts a stop to changes previously going on, even if it does not kill the organisms outright; and as to placing them under aseptic conditions this is practically an impossibility. How is it possible to place Confervoid cells, encysted Amœbæ or Ciliates, or Rotifer eggs under aseptic conditions without injuring or actually killing them?

I am hopeful that the facts which I am accumulating will gradually be seen, when looked at broadly and as a whole, and when alternative explanations are weighed fairly and without bias, to be only compatible with the admission of the present widespread occurrence of Heterogenesis—preconceptions to the contrary notwithstanding. And what would be the results consequent upon this change of view? Some of these results I have referred to in an Appendix to Part I, but I would only say here that we should have for one thing a logical explanation (now missing), consistent with the great doctrine of evolution, of the existence of the myriads of lower organisms that are found on the surface of the earth at the present day.

I am, Sir, yours truly,
H. Charlton Bastian.

Manchester Square, W., October 11, 1902.

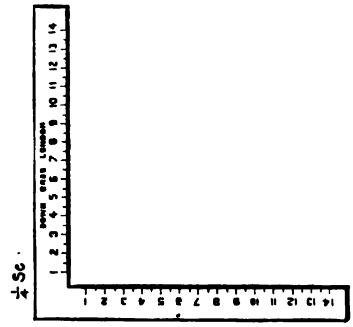
The office of the Principal Medical Officer of the Woolwich Military District, now held by Surgeon-Colonel G. D. N. Leake, is to be abolished, consequent upon the incorporation of the Woolwich and the Thames Districts in the new Army Corps.

New Inventions.

A NEW COXAMETER.

Designed by G. Jameson Johnston, M.A., M.B., F.R.C.S.I.,
Surgeon to the Royal City of Dublin Hospital.

In the course of my clinical teaching I have found difficulties in demonstrating and accurately measuring displacements of the great femoral trochanter. While fully appreciating the merits of Bryant's lines, I am of opinion that, except in gross displacements, they are of little service. This failure is in no way due to the lines themselves, but to the ordinary methods of using them, the numerous sources of error introduced rendering the result very approximate indeed. The difficulties are first drawing a straight line, next drawing two straight lines at right angles over curved surfaces which are somewhat mobile. Discussing the matter with Messrs. Down's representative, he said his firm would endeavour to carry out my ideas. Accordingly, after several experiments with various metals, such as pewter, copper, &c., that firm has succeeded in making for me a coxameter which I have repeatedly found useful in the examination of fractures, dislocations, coxa vara, &c., reaching a degree of accuracy I had not hitherto attained. The instrument, which is simple in the extreme, is in the form of a "square," and made of hammered German silver; it consists of two flexible limbs, permanently fixed at right angles, graduated on both sides of each limb, in centimetres starting from the angle.



The method of use is as follows:—Place the patient in the recumbent position, make a mark with a dermograph immediately over the anterior superior spine of the ilium, and another over the highest point of the great trochanter, placing one limb of the instrument on each so that one is vertical and the other horizontal. The measurements are read off, the horizontal limb indicating upward displacement, and the vertical one the degree of eversion. The instrument is equally applicable to both sides.

Obituary.

WILLIAM CHALMERS, L.F.P.S., GLASGOW.

We regret to announce the death of Mr. Chalmers which took place at his residence, George Street, Glasgow, a few days ago. He had been laid aside from active professional work for a few months. His work was chiefly among the working classes, with whom he was very popular, even the poorest receiving the utmost attention at his hands. Apart from professional work he found time for various public duties, being a member of the Parish Council, as well as chairman of the Ninth Municipal Ward Committee. His loss is much deplored by the people of the east end of the city where he practised.

Death under Chloroform.

A girl, aged nine, died under chloroform at the Cardiff Infirmary last week, and the parents complained that they had not been informed of the necessity for an operation. It appeared that the operation was one of an extremely urgent nature, and according to the medical evidence the chloroform had no share in the causation of death.

Society for the Relief of Widows and Orphans of Medical Men.

At the Quarterly Court of Directors of this Society, held on the 8th inst., the President, Mr. Christopher Heath, in the chair, applications for renewal of grants were read from fifty-four widows, ten orphans, and five recipients from the Copeland Fund, and a sum of £1,321 was voted to be given at the next Court. One widow had become ineligible through marriage for further grants. The deaths of three members were reported. The Directors passed a resolution of regret on the death of Mr. J. T. Ware, F.R.C.S., and V.P., elected in 1845, and at one time acting treasurer of the Society. The election of a member was declared void. It was resolved to distribute at Christmas £590 among the widows and orphans in receipt of grants—£10 to each widow, £3 to each orphan, £5 each to the four receiving special grants from the Copeland Fund.

The Royal College of Surgeons, Ireland. Address to the Lord Lieutenant.

A deputation representing the Royal College of Surgeons, Ireland, waited upon his Excellency the Lord Lieutenant, on Friday last, for the purpose of presenting an address of welcome. The address was as follows:—

"May it please your Excellency—We, the President, Vice-President, and members of the Council of the Royal College of Surgeons, Ireland, desire to offer you our most respectful greetings on the occasion of your arrival in Ireland as the representative of our beloved Sovereign, his Most Gracious Majesty the King. We beg leave, on behalf of our College, to give expression to those feelings of loyalty and devotion to his Majesty's Throne and Person which have ever animated the Fellows and Licentiates of the College since its incorporation by Royal Charter, in 1784. We respectfully desire to draw your Excellency's attention to the work done by our College, which we trust is of considerable service to the community. The functions of our College are primarily to educate young men in all branches of medical science, and secondarily, in conjunction with the Royal College of Physicians in Ireland, to admit them, after due and proper examination, to the various diplomas of the College. That our work is highly productive is shown by the large number of medical men holding our diplomas who are engaged in the practice of their profession, not only in the United Kingdom, but in all the colonies and dependencies of the Empire, and in his Majesty's Naval and Military Services. We claim that not only have we given these gentlemen a sound professional training, but that we have also taught them the higher moral lessons of obedience to the call of duty and unselfish devotion in the execution of it. The proofs of this assertion are to be found in the long roll of Irish surgeons who have in the recent war in South Africa obtained the highest recognition at the hands of our Sovereign and in that happily shorter list of those who have sealed their devotion with their lives. We venture to hope that during your Viceroyalty you may do us the honour of visiting our College, and by inspection of its various departments, satisfy yourself that we are mindful of our duty to his Majesty and his subjects. We pray permission to offer our respectful welcome to the Countess Dudley and family, and to express the hope that your stay in this country may be marked by happiness to yourself and prosperity to those you have come to rule over. We have the honour to be your Excellency's obedient servants,

Lambert Hepenstal Ormsby, President.
Arthur Chance, Vice-President.
Charles A. Cameron, Secretary.
G. F. Blake, Registrar.

The address having been presented, his Excellency thanked the representatives of the College for the address, and for the expressions of loyalty and devotion to his Majesty's throne contained therein, a loyalty which had animated the members of their distinguished college for upwards of a century. He could thoroughly realise the importance of the work carried out by the Royal College of Surgeons in Ireland. To the United Kingdom and the Empire at large, as well as to his Majesty's Naval and Military Services, it has rended signal aid. The name of the gallant young Irish surgeon, Captain Crean, who lately won the Victoria Cross in South Africa, and the noble Dr. Smyth, who died to save the lives of the fever-stricken islanders off Donegal, were fresh in the memory of the British nation, and had added fresh honour to the Irish College from which they came. During his service upon Lord Roberts's staff he had ample opportunities of observing the invaluable work done by the Irish Hospital in South Africa, under Sir William Thompson, a former distinguished President of the College, the history of which they might be justly proud. He was sure that it would always maintain its present high position, and he looked forward with pleasure to a visit one day to inspect the various departments of the College.

A Practitioner Censured.

Dr. Bolton, of Nottingham, attracted an expression of disapprobation from the local Bench last week for having sent a postcard to the police, warning them not to allow a certain patient of his to wander abroad, adding that he would hold the police responsible for anything that might occur, he being of unsound mind. Admitting that a communication of this nature should preferably have been sent in the form of a letter, we see nothing in the act itself deserving of censure. Only by a stretch of the ordinary meaning of the term could it be described as a threat.

Professor Lorenz and the Practice of Medicine in the United States.

Professor Lorenz, of Vienna, whose trip to America in exchange for a colossal fee for the purpose of performing an operation for hip-joint disease has been widely commented upon in the daily press, has, it seems, been called to order for practising medicine there without the required licence. The proceedings were characterised by a suavity which does not always characterise officials over there. He was summoned to appear before the Board of Health, and is reported to have passed an hour answering questions concerning the theory and practice of medicine, whereupon a licence was handed to him, and the sitting came to an end. This retrospective licence will enable the professor to place his services at the disposal of the "crowds" who are stated to be anxious to be operated upon by him ere he returns to Vienna.

Action for Malpraxis.

The trial was concluded at Dundee last week of an action brought against Dr. William Craig, of Cowdenbeath, for the recovery of £500 damages for alleged malpraxis in respect of a child who had sustained several fractures of limbs. It was alleged that the existence of the fractures in question had been negligently overlooked, but ultimately, after a protracted hearing, the jury returned a verdict in favour of the defendant.

Pseudo-Chlorodyne Lozenges.

An inquest was held a few days since at St. Pancras on a child who had died after eating an ounce of "chlorodyne lozenges" bought of a Camden Town chemist. The chemist stated that the lozenges contained no chlorodyne at all, the description being, he admitted, of the nature of "a pious fraud." The chemist, who bought the lozenges wholesale, was unable to substantiate his assertion that there was no chlorodyne in the lozenges, but, as the medical evidence showed death to have been due to quite another cause, the matter was allowed to drop.

More Gratuitous Work.

The police appear to have curious ideas as to the duty of medical men to furnish gratuitous information. Dr. John Stewart, of Soothill, Yorks, having refused information concerning a patient of his unless paid for the certificate, the police managed to obtain the information from the matron of the local hospital, and in court had the audacity to describe Dr. Stewart's conduct as "extraordinary." The extraordinary conduct is that of the police in seeking to obtain the services of the medical man without payment. There is far too much of this sort of thing, and practitioners would do well to impress upon the authorities on every possible occasion that medical assistance in any form is something worth paying for.

Royal College of Physicians of Ireland.

The annual meeting of the College was held on Saturday, October 18th, when the various officers for the ensuing year were elected :—President: D. A. V. Macan. Censors (4): Dr. Bewley, Dr. Wilson, Dr. Coleman, Dr. Peacocke. Vice-President: Dr. H. Bewley. Additional Examiners to take the place of an absent Censor :—Medicine: Dr. Lennon. Medical Jurisprudence and Hygiene: Dr. S. T. Gordon. Midwifery: Dr. Horne. Examiners in Midwifery :—Dr. Glenn, Dr. Jellett. Examiners, in addition to Censors, under the Conjoint Scheme.—Biology: Dr. Cosgrave. Chemistry: Dr. Lapper, Dr. Falkiner. Physics: Dr. Travers Smith, Dr. Winter. Pharmacy, Materia Medica, and Therapeutics: Dr. Drury, Dr. Dempsey. Physiology: Dr. Earl. Pathology: Dr. O'Sullivan. Medicine: Dr. Redmond, Dr. O'Carroll. Hygiene and Forensic Medicine: Dr. Montgomery. College Examiners for the Conjoint Preliminary Examination :—Languages: Mr. William Kennedy, F.T.C.D. Science: Mr. W. E. Thrift, F.T.C.D. Examiners for the Conjoint Diploma in Public Health :—Hygiene: Dr. Bewley. Chemistry: Dr. Lapper. Meteorology: Dr. Falkiner. Representatives on the Committee of Management under the Conjoint Scheme: Dr. Finny, Sir J. W. Moore, Dr. Craig. Representative of the College on the General Medical Council: Dr. Atthill. Treasurer: Dr. Atthill. Registrar: Dr. Craig. Librarian: Mr. R. G. J. Phelps. Agent to Manage the Trust Estate: Mr. Townshend. Law Agents to the College: Messrs. Stephen Gordon and Son. Architect: Mr. A. E. Murray. Walter G. Smith, M.D., F.R.C.P.I., Physician to Sir Patrick Dun's Hospital, was re-elected King's Professor of Materia Medica and Pharmacy, in the School of Physic, of Trinity College, Dublin. The following were elected Fellows of the College :—Stewart Woodhouse M.D., Member of the General Prison Board of Ireland; W. J. Thompson, M.D., Physician to Jervis Street Hospital. The annual banquet was held in the College Hall on the same evening. His Excellency the Lord-Lieutenant honoured the College by his presence.

Royal College of Surgeons, Edinburgh.

At the annual meeting of this College, on the 15th inst,, the following office-bearers were elected for the ensuing year :—President. - Sir John Halliday Croom, M.D. Vice-President.—James Dunsmure, M.D. Secretary and Treasurer.—Francis Cadell, M.B., LL.D. Librarian.—Charles Watson MacGillivray. M.D. President's Council. — Douglas Argyll, Robertson, M.D., LL.D., Joseph Bell, John Chiene, Alexander Gordon Miller, William Craig, M.D., Charles Watson MacGillivray, M.D., Ex-Off. Francis Cadell, Ex-Off James Dunsmure, Ex-Off. Patrick Heron Watson, M.D., LL.D. Representative on General Medical Council.—Patrick Heron Watson, M.D., LL.D. Examiners.—Sir Henry D. Littlejohn, Patrick Heron Watson, John Smith, Douglas Argyll Robertson, Joseph Bell, Robert James Blair Cunyghame, Alexander G. Miller, Peter Hume Maclaren, Francis Cadell, George Hunter, James Dunsmure, Charles E. Underhill, James Ritchie, William Craig, Charles W. MacGillivray, William A. Finlay, Joseph M. Cotterill, James, Hunter, Charles W. Cathcart, Francis M. Caird, Charles H. Thatcher, George A. Berry, James W. B. Hodsdon, Robert McKenzie Johnston, William George Sym, Robert H. Blaikie, Robert A. Lundie, Stewart Stirling, George Mackay, jun., David Wallace, Henry Alexis Thomson, Kenneth M. Douglas, Harold J. Stiles, Alexander Miles, John W. Dowden, Arthur Logan Turner, Henry Harvey Littlejohn, William Guy, Richard J. A. Berry, Theodore Shennan, James Veitch Paterson, Frank Grant Ogilvie, R. Stewart MacDougall, Andrew P. Aitken, James Kerr.

Public Health Examiners.—Sir Henry D. Littlejohn. Robert J. Blair Cunynghame, William Craig, George W. Balfour, M.D., J. Falconer King, F.C.S., George H. Gemmell, F.C.S., Alexander Buchan, LL.D., William Lees, M A.

Dental Examiners.—Patrick Heron Watson, John Smith, Joseph Bell, William Craig, William Guy, L.D.S., Henry Harvey Littlejohn, George W. Watson, L.D.S., Frederick J. Turnbull, L.D.S.

Assessors to Examiners.—Sir William Turner, Douglas Argyll Robertson, Thomas Annandale, Sir Henry D. Littlejohn.

Conservator of Museum (interim).—Theodore Shennan, M.D.

Clerk.—James Robertson, Solicitor.

Auditor of Accounts.—George H. Carphin, C.A.

Officer.—Clarendon Hyde Creswell.

Assistant to Conservator.—George Reid.

The New Hospital for Children.

The new Hospital for Children suffering from Hip Disease, erected at a cost of about £12,000, which is situated on an elevated site on Tubs Hill, at Sevenoaks, was opened on the 16th inst. by Lady Norah Hodgson. In proposing a vote of thanks to her, Sir Henry Burdett remarked that hip disease was an affliction which required a very prolonged period of treatment to effect any lasting result, and the consequence was that an institution of that kind, when properly conducted and the benefits rightly administered, proved a lasting benefit to those children whose parents were so circumstanced that they could not at home find a means to enable the child to have the necessary treatment.

Westminster Hospital Medical School.

Scholarships have been awarded as follows to gentlemen who entered at the Westminster Hospital Medical School on October 1st:—Epsom Scholarship (110 guineas) to Mr. J. A. Hicks. First Scholarship in Arts (£60) to Mr. J. N. Beadles. National Science Scholarship (£60) to Mr. G. G. James. Second Scholarship in Arts (£40) to Mr. A. W. Hayward. Second Science Scholarship (40) to Mr. G. H. Curtis.

Anti-vaccinationist Tactics.

A batch of young "conscientious objectors," who had not been able to satisfy the Chesham magistrates of their conscientious objections, put in an appearance at the Southwark Police Court last week in the hope of meeting with more sympathy. Their expectations were realised, for Mr. Paul Taylor granted the exemptions, remarking that he hoped there would not be an outbreak of smallpox at Chesham.

Pass Lists.

The Royal University of Ireland.

The Examiners have recommended that the following candidates be adjudged to have passed the undermentioned examinations respectively :—

M.B., B.Ch., B.A.O. Degrees Examination.—Upper Pass: * Sydney H. G. Blakely, * William H. N. Bright, * John P. I. Harty, B.A., * Samuel T. Irwin, B.A., * William Warn.

The candidates marked with an asterisk may present themselves for the further examination for honours.

Pass: Robert Best, John D. Buchanan, James H. Campbell, Patrick J. Carroll, B.A., Peter F. Dolan, M.A., Alfred J. Foote, Augustine T. Frost, James W. Killen, Michael M. Lee, B.A., George F. Luke, Francis E. McCune, B.A., James F. G. Martin, Robert Mathewson, Ernest D. Rutherford, William B. Sampson, William J. Sheehan, John Shipsey, Joseph H. Thompson, Edward T. Tuckey.

M.D. Degree Examination.—Pass: Charles E. McDade, B.A., M.B., B.Ch., B.A.O.; Thomas J. MacDonogh. B.A., M.B., B.Ch., B A.O.: Arthur B. McMaster, M.B., B.Ch., B.A.O.; Daniel J. O'Connor, M.A., M.B., B.Ch., B.A.O.; Lucy E. Smith, M.B., B.Ch., B.A.O.

Conjoint Examinations in Ireland.

Candidates have passed the First Professional and Second Professional Examinations as undernoted :—

First Professional.—(*a*) All Subjects: P. J. Cusack, C. Dolan, M. J. Glassey, Jas. O'Brien. (*b*) Completed the Examination: W. R. Burton, A. Hamilton, M. Kennedy, J. J. McGreal, T. O'Brien, F. A. O'Donnell, Jas. Reardon, Miss A. B. Reynolds, E. C. Wallace.

Second Professional.—Old Scheme: W. H. Bournes, Jas. Stuart.

The names of those who have passed Part I. are not published.

Notices to Correspondents, Short Letters, &c.

☞ **Correspondents** requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

Original Articles or Letters intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

THE "CURE" OF CONSUMPTION.

Sir,—In your article under this heading in your issue of Oct. 15th you refer to "my interesting study of the objects and benefits of Sanatoria," published in my last annual report. May I call attention to page 58, line 5-7 of my report? where I expressly state that *the summary was prepared by the Medical Officer of Health for Brighton* (Dr. Newsholme); it was published in his annual report, from which I quoted it. Unfortunately, my signature to my report on page 70 follows closely at the end of this summary, looking as if I claim it, which I had no intention of doing.

Yours faithfully,
D. S. Davies, Medical Officer of Health.

Bristol, Oct. 19, 1902.

Mr. G. Stronach (Edinburgh).—We are unable to devote any further space to the discussion of the Shakespeare-Bacon controversy.

PROBABLE!

The probable reasons for the objections raised against the more general use of the automobile or motor-car, a correspondent suggests, are:—(1) Its detrimental effect on the vaso-motor nerves and (2) motor cortex, and (3) by its continued vibration eventually producing locomotor ataxy!!!

M. R. S.—Evidently in every well-ordered sick-room the management of the nurses must be left in the hands of the medical man in charge of the case. At the same time, as the nurses are paid by the patient it is he who must ultimately decide whether he prefers parting with his doctor to parting with his nurse, in the event of the former proving dissatisfied with the manner in which his directions are obeyed. Difficulty only arises when the medical man is unable to allege positive misconduct, although in reality it is easier to work with an undertrained than with an arrogant or insolent nurse.

D. Q. R.—We should not advise you to seek to enforce the claim. There is no unanimity of opinion among judges on the point you raise, and your reputation might suffer in the event of an adverse decision.

Mr. Ainet.—The blocks were thought to be unsuitable, and were therefore dispensed with. They might, of course, be incorporated in the reprints.

THE ORIGINATOR OF THE RADICAL CURE FOR HYDROCELE.

To the Editor of The Medical Press and Circular.

Sir,—I shall feel obliged by your allowing me to draw attention to the fact that the operation of excising the tunica vaginalis testis as a radical cure for hydrocele was described, performed, and advocated by an English surgeon, Mr. Kinder Wood.

I write this because most medical dictionaries and almost all text-books give the credit to either Bergman or M. Julliond, although Mr. Kinder Wood's description was in print before they were born.

Yours truly,
Oct. 18th, 1902. George Foy.

Meetings of the Societies, &c.

Wednesday, October 22nd.

Dermatological Society of Great Britain and Ireland (20, Hanover Square, W.)—5 p.m. Meeting.

Hunterian Society (London Institution, Finsbury Circus E.C.).—8.30 p.m. Dr. S. Sharkey: The Cardiac Muscle from a Clinical Point of View. (Postponed First Hunterian Lecture.)

Thursday, October 23rd.

Childhood Society (Library of the Sanitary Institute, Margaret Street, W.).—8 p.m. Members' Evening. Papers:—Mrs. S. A. Barnett: On the Principles and Aims of the State Children's Association.—S. de Brath: On Primary Mathematical Teaching.

Chesterfield Lecture, at 6.15 p.m. on "Erythema," by Dr. Morgan Dockrell, at the St. John's Hospital for Diseases of the Skin.

Friday, October 24th.

Clinical Society of London (20, Hanover Square, W.).—8 p.m. Exhibition of Clinical Cases followed by Discussion. Patients will be in attendance from 8 p.m. to 9 p.m.

Appointments.

Brydone, J. M., M.B., B.C.Camb, M.R.C.S., L.R.C.P Lond., Resident Medical Officer to the Bright Ward, Guy's Hospital.

Dawes, J. W., M.B., M.S.Edin., Medical Officer of Health for the Borough of Longton.

Eden, William Annesley, L.R.C.P.Lond., M.R.C.S., L.S.A., Medical Officer of Health by the Wadebridge (Cornwall) District Council.

Frengley, Joseph P., M.D., B.S., R.U.I., District Health Officer under the Department of Public Health of the New Zealand Government.

Hudson, Arthur, L.R.C.P.Lond., M.R.C.S., D.P.H. Cantab., Public Vaccinator for the Kenton District by the St. Thomas (Exeter) Board of Guardians.

Morris A. B., L.R.C.S., L.M.K.Q.C.P.I., Medical Officer of Health for the District of St. Helens, Tasmania.

Okell, George, Jun., L.R.C.P.I., Certifying Factory Surgeon for the Winsford District of the County of Cheshire.

Roll, G. Winfield, M.B., B.C Cantab., F.R.C.S.Eng., Honorary Ophthalmic Surgeon to St. Mary's Hospital for Sick Children.

Scorah, Ernest John, M.R.C.S., L.R.C.P.Lond., Senior House Surgeon to the North Riding Infirmary, Middlesbrough.

Wareham, Sidney J., F.R.C.S.Eng., L.R.C.P.Lond., L.S.A., Honorary Medical Officer to St. Mary's Hospital for Sick Children.

Vacancies.

City of Nottingham Workhouse Infirmary.—Assistant Medical Officer. Resident. Salary £160 per annum, with furnished apartments, board, washing, &c. Applications immediately to Clerk to the Guardians, Shakespeare Street, Nottingham.

County Asylum, Prestwich, Manchester.—Junior Assistant Medical Officer. Salary £150, with board, furnished apartments, and washing. Applications to the Medical Superintendent

County Lunatic Asylum, Lancaster.—Assistant Medical Officer. Salary £150 per annum, with board, &c. Applications to the Medical Superintendent.

Greenwich Union Infirmary.—Junior Medical Officer. Salary £100 per annum, with furnished apartments, rations, washing. Applications to Samuel Saw, Clerk to the Guardians, Guardians' Office, East Greenwich, S.E.

Jenner Institute of Preventive Medicine.—Assistant Bacteriologist for the Serum Department. Aldenham, Herts. Salary £200 per annum, with furnished rooms. Applications to the Secretary, Jenner Institute, Chelsea Gardens, S.W.

Manchester Children's Hospital.—Lady Superintendent. Salary £100 per annum, with board, rooms, washing, and attendance. Applications immediately to the Secretary, Children's Dispensary, Gartside Street, Manchester.

Parish of Fulham.—Assistant Medical Superintendent. Salary £120 per annum, with board, furnished apartments, attendance, and washing. Applications to Edward J. Mott, Clerk to the Guardians, Guardians' Offices, 75, Fulham Palace Road, Hammersmith, W.

Parish of Small Isles.—Resident Medical Officer. Salary £100 per annum, together with private practice. Applications to Jas. Campbell, Inspector of Poor, Small Isles, Island of Eigg, by Oban.

St. Mary's Hospital, Paddington, W.—Bacteriologist. Salary £150 per annum. Applications immediately to the Dean.

St. Mary's Hospital, Paddington, W.—Pathologist. Salary £250 per annum. Applications immediately to the Dean.

Wolverhampton and Staffordshire General Hospital.—House Physician. Salary £100 per annum, with board and lodging. Applications to Edmund Foster, House Governor and Secretary.

Births.

Grayling.—On Oct. 12th, the wife of Arthur Grayling, M.B.Lond. of Forest Hill, S.E., of a daughter.

Harris. On Oct. 15, at Bell Street, Shaftesbury, the wife of W. J. Harris, M.D., of a son.

Sutcliff.—On Oct. 14th, at Park Villa, Torrington, Devon, the wife of E. Harvey Sutcliff, M.B.Dur., of a son.

Marriages.

Crabtree—Purkis.—On Oct. 14th, at St. George's, Hanover Square, Angelo Matteo Crabtree, F.R.C.S.Eng., of Hungerford Lodge, Oatlands Park, to Agnes Constance, elder daughter of the late Charles Blomfield Purkis, of Sturmere, Essex.

Kilkelly—Maquire.—On Oct. 17th, at Bombay, Captain P. P. Kilkelly, Poona Horse, son of Surgeon-General Kilkelly, of Drimcong, co. Galway, and Dublin, to Violet, daughter of Thomas Maquire, Esq., of King's Court, Bray.

Parsons Lappin Reilly.—On Oct. 6th, at St. Columbkille's Church, Kells, by the Right Rev. Monsignor Gaughran, P.P., V.G., William Parsons Lappin, L.R.C.P. and S.Edin., L.F.P. and S.Glasgow, &c., to Margaret, only surviving daughter of Thomas Reilly, Cross Street, Kells. No cards.

Deaths.

O'Brien.—On Oct. 15th, at the Hospital of St. John and Elizabeth London, Ada Hilda, aged 50, wife of Brigade Surgeon Eugene R. O'Brien, M.D. late A.M.S.

Reed.—On Oct. 11, at 34, Culverden Park Road, Tunbridge Wells Dr. Martin Reed, formerly of Hurst Court, Hastings.

INCORPORATED DENTAL HOSPITAL,
IRELAND, Lincoln Place, Dublin.

The Board of Guardians require the services of two gentlemen willing to act as ANÆSTHETISTS. Applications on or before 25th inst. to—

WILLIAM A. SHEA, J.P., Registrar.

The Medical Press and Circular.

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Clinical Readings and Practices.

I.—PNEUMOPARESIS. (a)

By the late

SIR B. W. RICHARDSON, M.D., F.R.C.P., F.R.S.

BY the term Pneumoparesis I mean a form of disease usually confounded with pneumonia in which the symptoms are due to sudden failure of nervous stimulus to the pulmonary vascular systems, nutritive and respiratory.

Pneumoparesis is unattended by any preceding rigor or by pyrexia, but is preceded by a distinctive train of nervous symptoms consisting of emotional excitement, erythema fugax, and extreme physical prostration, with short cough, accompanied by little expectoration. The mind is impressed with the idea of impending death, but neither alarmed nor anxious, is perfectly resigned. There is no acute pain at any stage. The physical signs are dulness, commencing, as a rule, in the bases of the lungs, posteriorly, but sometimes in patches or centres—with fine crepitation at first, soon becoming moist, and in the later stages with bronchial râles.

The symptoms run a rapid course, usually fatal, and are of a kind such as might be expected if the nervous supply entering by the root of the lung were cut off. Some years ago I produced, in synthetical research, an artificial pneumoparesis in the lower animals—rabbits—by placing them in an atmosphere of amyl nitrite. In these cases the pulmonary paresis was caused by the action of a chemical substance upon the pulmonary nervous structures, and recovery followed upon the withdrawal of the cause; but the effects whilst they lasted were identical, precisely, with those which characterise pneumoparesis in the human subject.

It is as yet a moot point whether the nervous failure commences in the nutritive circulation derived from the thoracic aorta, or in the respiratory circulation of the pulmonary artery. I have devoted a considerable amount of attention to this point. It is a subject rarely studied in relation to pulmonic affections, but it calls for the minutest attention. In regard to pneumoparesis I think, on the whole of the evidence I have seen, that the failure probably is due to paresis commencing in the nutritive pulmonary vessels, and that the obstruction from failure in the respiratory circulation is secondary. Leaving this question *sub judice*, I come next to the study of the nature of the nervous failure upon which the lesion which causes the disease depends.

The primary lesion in the nervous centre may be due to one of three causes:—

(*a*) It may be due to mechanical injury, pressure on, or shock to, the nervous supplying centre or its plexuses.

(*b*) It may be due to the generation within the body of some chemical product which like amyl nitrite reduces to paresis the organic nervous supply.

(*c*) It may be due to hereditary failure or premature exhaustion of the nervous supplying centre under exhausting or depressing influences.

For my own part I am inclined to think that, taking the whole of the evidence into consideration, the balance is in favour of the view that the third supposition is most correct, and we have only to let the mind become accustomed to the thought of the possible arrest of or diminution of nervous stimulus in the pulmonary circulations, as we do in respect to other organs of the body in order to see the fact of pneumoparesis as one of the most simple and clear forms of nervous failure and resultant structural lesion.

But presuming that I am right on this point how wide a field of observation it opens. Most of the aged and infirm die, as by natural anæsthesia, from pneumoparesis under the added influence of cold, privation, fatigue, worry, grief, fear, physical or nervous shock, or some other depressing cause. An aged person goes to bed at night after a day of fatigue or care; he sleeps in a cold room breathing the cold air—the very conditions for the production of pneumoparesis. There is now no necessity of physical shock to the nervous centres; the shock of the cold upon the peripheral nervous expanse of the pulmonary circulation is alone sufficient to produce the paresis, and that mode of death which is so common in the aged, from what is usually called congestion of the lungs.

I think, again, that in those whom we designate as consumptive persons there is the same nervous failure, and that such failure is the predisposing cause of the disease from which they, in the end, succumb. In plain words, pneumoparesis is the natural mode of death in those who have reached the full term of human existence; it is also the mode of death of those who have come to the close of a predestined premature term of human existence.

Returning to the cases of acute pneumoparesis to which my present communication refers. I have now seen five well marked instances of pneumoparesis, and I regret to be obliged to say that they have all ended fatally in spite of every care and every attention to details of treatment. In one instance there was a period in the course of the malady during which there was an apparent intermission of the symptoms, and this so far is hopeful, but even here the improvement was but temporary, whilst in all the remaining cases the course of the affection was, from stage to stage, to death in the steadiest conceivable gradation.

(a) We published some "Clinical Readings and Practices" in 1888, written specially for this Journal by the late Sir B. W. Richardson, the numbers containing which have been long since out of print. So much interest was taken in these papers that quotations from them by past and present writers has determined us to yield to the requests of several of our subscribers to reprint them. The next paper will be on "Hydrops Bronchialis."

In all the acute cases I have yet seen, with one exception, the patients have been women, and they have all borne with them some history of hereditary tendency to chest disease, usually of phthisis pulmonalis. They have also shown in their own persons signs of nervous feebleness with some excitability and emotional disposition. In the one and only example of the affection I have seen in the male subject the patient was advanced in life, but was considered healthy up to the time of his fatal illness. I did not see him whilst he was living, but was requested by his family to make a post-mortem of his body, his death having been very rapid and unexplainable in the ordinary experience. From the symptoms detailed to me, I was able to diagnose the condition of disease and the cause of the death. The symptoms were clearly those of pneumoparesis, induced by exposure to cold. The post-mortem confirmed the diagnosis. Both lungs were congested in the extremest degree, and there was a small exudation of serum into each pleural cavity. There was no other lesion in the body to account for death. The right side of the heart was distended with blood, but the organ was healthy. The abdominal viscera and the brain were healthy.

In another case of pneumoparesis, to which I was summoned, I was very much perplexed. The patient, again a lady, had been ill some days; she presented all the general symptoms of pneumoparesis as I have described them above, but the most careful exploration of the lungs did not enable me to detect crepitation at any part. In this dilemma it was quite impossible for me to declare the presence of pneumoparesis, or to give the precise prognosis which I dreaded. I left the house with the most serious misgivings, hoping in my own mind that I might be wrong after all in my fears. Unfortunately they were only too true. On the third day after my visit I received the information that the patient was dead. The latent disease which I had not been able to discover became pronounced soon after my visit; the lung, on both sides, began to fill up, and death from pure asphyxia took place.

In this last case I did not ascertain whether or not there had been any preceding accident or other exciting cause leading up to the fatal attack. But in all the preceding instances there had been some such cause. In one it was a chill from sitting on damp grass just before the menstrual period. In another a fall, during the seventh month of pregnancy, seemed to have been the source of mischief. In a third some mental trouble seemed to have led to the primary nervous disturbance and failure, and in a further example exposure to cold. In every case the cause was trivial compared with the seriousness of the result.

Treatment of Pneumoparesis.

In the treatment of pneumoparesis, the pathies, one and all, are nowhere, and in this, as in so many other instances, it looks as if the value of treatment receded just as more correct knowledge of cause and causation advanced. The problem is clear, but how is it to be solved? The problem is :—Given a condition in which the organic nervous supply of the pulmonary area, and of the circulation within that area, is suppressed from any cause; how shall the failure be rectified?

In the cases from which I have learned the clinical facts on which the name pneumoparesis is founded every rational mode of treatment was tried; but it was purely tentative. No specific line of treatment was possible. All that could be done was to meet the more urgent symptoms as they arose. Digitalis was administered in one case when the circulation was rapid, but I dare not say that it did any real service. Ergot was used in another case with a like negative result. The ammonia treatment was resorted to once in the hope that by keeping the blood in a fluid state the circulation might be sustained in action and time gained; and, to this nux vomica was also added in free doses, but again without avail. The record, in short, is discouraging from the beginning to the end of the chapter.

In another example of pneumoparesis I shall adopt a practice of a different kind. I shall administer oxygen gas at a temperature of 95° Fahr. so as to endeavour to hold back the asphyxia and to gain time by and for natural restoration of the nervous balance. But even this would not be a radical cure, although in the right direction.

In the debate which took place at the Medical Society of London, when the above paper was read before that learned body, many suggestions were made on the subject of treatment, the plan of employing oxygen by inhalation being, I think, that which met with most favour. My old friend Dr. Routh thought that electricity might be brought into use; but, for my own part, if I were called to another case of the kind I should not know how to apply an electric current in such a manner as to sustain the failure of nervous power. We must always remember that electric excitation, as we know of it up to this time, is a stimulating and exhausting, as distinct from a sustaining, mode of treatment, so that if we could bring it to bear upon the organic nervous function, and, could for a short time, excite or exalt functional activity, we should, in the end, do no more than wear out the remaining natural life and hasten dissolution, That which we really want to do is to recharge the exhausted animal battery, not stimulate it. If a current from a newly charged battery were passed through the wires of a discharged one it might seem to a looker on, who did not see to the bottom of the proceeding, as if the worn out battery were exhibiting new vigour, but it would be seeming at the best, and in unstable textures, like those of organic life, evil, instead of good is most likely to follow upon the experiment of stimulation by an electrical current, direct or intermittent.

MODERN ASPECTS
OF THE
MERCURIAL TREATMENT OF THE GRAVER COMPLICATIONS OF SYPHILIS.

By Dr. LEREDDE,
Of Paris.

The points to be discussed in the present communication are:—(1) The necessity of treating the graver complications of syphilis solely by means of mercurial injections; and (2) the necessity of considerably increasing the doses of mercury at present employed to combat them.

With respect to the preference to be given to mercurial injections, it will be shown later what an important part the dose of mercury introduced into the organism plays in the therapeutics of syphilitic lesions. Now, injections are the only means we possess of administering a definite quantity of mercury. Everyday experience has convinced dermatologists that the therapeutical effect of proto-iodide pills (0 gr. 10 centigr. daily) is inferior to that of a weekly injection of 0 gr. 10 centigr. of calomel, and that the therapeutical effect of inunction, in a daily dose of 6 grammes, is almost invariably inferior to that of the calomel injection. It is not to be supposed that a patient who takes daily 0 gr.

10 centigr. of proto-iodide absorbs the whole of the salt, or that the subject who rubs in say 6 grammes of blue ointment absorbs each day 3 grammes of metallic mercury. The former, indeed, would soon develop symptoms of poisoning, while the latter would become mercurialised after the very first inunction. Moreover, it is highly improbable that the intestine in all patients, absorbs the same quantity of proto-iodide even when administered in similar quantities, still less that the inunctions are followed by the absorption of a similar quantity of mercury in all subjects, through the skin or the lung (since a portion of the mercury is absorbed by the latter). We may take it therefore that there exists one, and only one, method at the present time, by means of which we can introduce a known quantity of mercury into the organism, viz., by injection, and whenever we wish to obtain the maximum curative effects of mercury without the toxic effects no other procedure is open to us than the method of injection.

My next point is that the therapeutical effect of mercurial injections depends on the dose of mercury introduced into the organism. I do not attach the slightest importance to the particular salt employed, soluble or insoluble, with regard to its therapeutic efficacy, which is the only point which we need consider. The therapeutical efficacy of a mercurial compound depends, I believe, solely on the quantity of mercury introduced into the organism in a given time. Statements bearing on the superiority of this or that salt (with regard to its efficacy) are contradictory, and may be explained on the ground of individual predilections.

It may be well to enumerate the various mercurial compounds in general use, giving the quantity of mercury contained in each, in order that we may institute a comparison between them :—

Mercurous chloride (calomel)	$Hg_2\ Cl_2$	— 84·92%
Mercuric chloride (sublimate)	$Hg\ Cl_2$	— 73 80%
Mercurous iodide	$Hg_2\ I_2$	— 61·16%
Mercuric iodide (biniodide)	$Hg\ I_2$	— 44·05%
Benzoate of mercury ...	$(C^6H^5CO^3)^2Hg$	— 45·25%
Cyanide of mercury... ...	$(C\ Az)^2Hg$	— 79 32%

This table shows that, of the soluble salts, the cyanide and sublimate (79 and 73 per cent. of Hg) contain nearly twice as much mercury as the benzoate and biniodide. Their therapeutic activity, in my experience, is obviously superior, in similar doses, and their toxic effects are more marked. Calomel is, of all the salts in general use, the richest in mercury, since we have almost given up the use of the yellow oxide; but we must ask ourselves how it comes to pass that calomel, according to most dermatologists, should be therapeutically superior to the soluble salts, and even to grey oil, in the treatment of the obstinate syphilides of the skin, which enables larger doses of mercury to be injected? To inject 0 gr. 10 centigr. of calomel every week is to introduce 0 gr. 08 centigr. of mercury into the organism. Now, by the injection, as is sometimes practised, of 0 gr. 015 milligr. of corrosive sublimate daily we obtain in a week a similar dose of mercury. To what are we to attribute the superiority of calomel, if the nature of the salt possesses no importance? It is easy to answer this question if we reflect upon the manner in which calomel acts on the organism. Every injection of this salt is followed not only by a loud reaction, but also by a general reaction. The rise of temperature and lumbago pain, which last for at least three days, can only be attributed to intoxication. We must admit that, during these three days, three-quarters, and perhaps more, of the calomel introduced into the muscle is absorbed. This, I think, is the only plausible explanation of the at times heroic action of an injection of calomel; it enables us to introduce into the circulation, in a very short space of time, a quantity of mercury infinitely greater than that which is introduced by any of the methods we usually employ, amounting possibly to 0 gr. 02 centigr. of mercury daily during the days following the injection. As to the injections of grey oil, they provoke neither marked local nor a general reaction; it is evident that this preparation is but slowly absorbed, as is proved by the tardy supervention of stomatitis one, two, or three weeks thereafter.

I really think that this question of dosage occupies a foremost place in any consideration of the mercurial treatment; if the cure of syphilitic patients depends on the mercury, it also depends on the action of a known quantity of mercury, a fact which I do not think has hitherto been pointed out. Moreover, all cases of syphilis are not cured by the same doses. In view of the slight difference between the quantity sufficient to effect the cure of a particular case and the insufficient dose, I think that the following law may be promulgated:—"Syphilitic lesions (I refer to active lesions) refractory to a quantity of mercury A, yield to a quantity A + a;" that is to say, when curative effects do not follow a known dose of mercury, it is only necessary to increase this dose to effect a cure. I may add that we must not rely on accumulation, or on the effect of the mercury, at the end of a certain period of absorption; the great point is the quantity of mercury taken into the organism in twenty-four hours.

These statements are the direct outcome of observations on cutaneous lesions treated with mercury, and the following very important conclusion may be deduced therefrom, viz., that we often meet with syphilitic lesions of the viscera, and particularly of the nervous system, which are believed to be refractory to anti-syphilitic treatment, but which, like certain cutaneous lesions, might be cured by the employment of larger doses than those usually resorted to. Before we pronounce them to be incurable therefore, it is our duty to push the treatment.

Now let us see in what way we may improve the mercurial treatment. In an interesting case reported by Dr. A. Robin, that of a young woman suffering from grave syphilitic iritis, threatening the organ of vision, the condition had withstood an injection of 0 gr. 10 centigr. of calomel, but was cured by the daily injections of 0 gr. 05 centigr. of benzoate of mercury for eight days, then of 0 gr. 03 centigr. for three weeks. What struck me particularly in this case was the fact that the benzoate of mercury proved therapeutically more active than calomel, but this was because Dr. Robin had employed it in much larger doses than usual. At that time I held the general view of the superiority of calomel over the other salts of mercury, a sort of specific superiority due to its being calomel; and I believed, like everyone else, that the injection of insoluble compounds gave better results than those of soluble preparations. At present this hypothesis appears improbable, for why should mercury be less active in the soluble than in the insoluble state? This statement is only correct when, as at the present time, we employ in injections of soluble salts only small doses, whereas in injections of insoluble salts we use stronger doses, so that the latter are necessarily the more active.

If we inject larger quantities of soluble salts of mercury we shall see that soluble preparations are more active than insoluble salts. At this point it may be asked whether the employment of larger doses of mercury does not expose the patient to grave dangers. A fact based on the study of the mercurial treatment, in all its phases, is that between the therapeutical dose and the toxic dose there is but a slight difference, and when we attempt to increase the former we incur the risk of mercurialism, with its disastrous buccal and cutaneous manifestations and constitutional disturbances.

Looking at the matter calmly, none of these dangers appear to be very great. It is a mistake to suppose that the toxic doses approximate so closely the therapeutical doses. This mistake arose at a time when the administration of mercury was not carefully regulated, when 0 gr. 10 centigr. of proto-iodide was given without any attention being paid to the amount absorbed, when six grammes of blue ointment was rubbed in in order to procure the absorption of a few centigrammes of metallic mercury. It is not surprising that from time to time grave troubles arose. I have referred to the fact that Dr. Robin was able to inject a daily dose of 0 gr. 05 centigr. of benzoate of mercury (0 gr. 022 milligr. of Hg) for eight days without any untoward symptoms. M. Lemoine stated, at the Toulouse Congress of Medicine, that he had cured patients suffering from ataxy and general paralysis by daily injections of from 0 gr. 06 centigr. to 0 gr. 08 centigr. (0 gr. 036 milligr. of Hg) of benzoate of mercury; M. Lepine also stated that he had injected 0 gr. 06 centigr. of biniodide daily in certain syphilitic subjects (0 gr. 026 milligr.), and in no case is any mention made of toxic sequelæ.

The doses of calomel generally injected (0 gr. 10 centigr. per week, *i.e.*, 0 gr. 084 milligr. of Hg) are much lower than those I have mentioned, and I may recall the fact that the earlier authors recommended the use of injections of calomel containing up to 0 gr. 15 centigr. and 0 gr. 20 centigr. of this salt each week (0 gr. 12 centigr. and 0 gr. 16 centigr. of Hg). These quantities of benzoate, biniodide, and calomel are much larger than the doses which we daily employ in injections. I do not refer either to inunctions or ingestion, since when prescribing inunctions or pills we never know what proportion of the mercury the patient really absorbs.

Syphilographs then use mercury in small doses. The great majority of cutaneous lesions, as a matter of fact, yield to 0 gr. 10 centigr., and even 0 gr. 05 centigr. of proto-iodide daily, teaspoonful doses of the solution of the perchloride, to inunctions of 4 gr. daily, a daily injection of 0 gr. 01 centigr. (0 gr. 008 milligr. of Hg) of cyanide or even of 0 gr. 01 centigr. (0 gr. 0045 decimilligr. of Hg) of benzoate, or even to 0 gr 004 milligr. of biniodide, following the formula of M. Panas (0 gr. 0017 decimilligr. of Hg). We have acquired the habit of prescribing mercury in these doses. If we have to treat grave or obstinate visceral lesions we prescribe without hesitation, "by tradition," frictions of 4 or 6 grammes of blue ointment daily, or injections of soluble salts in the doses mentioned above, which, although they cure ordinary cutaneous lesions, do not suffice to cure all cases. Neurologists, in the treatment of grave, obstinate lesions, are guided by the facts adopted by dermatologists for the treatment of cutaneous lesions which readily yield to treatment.

We ought, however, to bear in mind that, in treating visceral lesions, we should devise some other method than that used in the treatment of cutaneous lesions, since the latter are not of any immediate importance, while the former are often of the gravest nature. Therefore we ought always to aim at effecting a cure in the shortest possible space of time. If we have to do with spinal or cerebral lesions it may be a question of hours, because at any moment the obliteration of a vessel may be irremediable, and lead to softening. The question of dose is also of extreme importance, since there exists in the brain and spinal cord lesions which, like certain cutaneous manifestations, resist inadequate doses.

Mercurial stomatitis depends essentially on the state of the buccal mucous membrane. One patient may be able to tolerate without stomatitis a large dose of proto-iodide, while another cannot tolerate a much smaller dose. The same observation applies to inunctions and injections, either of soluble or insoluble salts. Persons who have the teeth and gums in good condition, cleaned by a dentist if there be the slightest doubt as to the state of the teeth at the commencement of the treatment, and who take the indispensable and minute care in regard to cleanliness, are able to tolerate a very large dose of mercury without stomatitis.

Mercurial stomatitis may be avoided even when large doses are employed, though, of course, the chances of its being produced are greater when the doses are stronger, but, directly it is apprehended, the necessary precautions must be taken, in order that it may not interrupt the treatment.

The only fact to be taken into consideration in the determination of the maximum doses of mercury is furnished by the symptoms of mercurial intoxication, fever, backache, prostration, &c.—phenomena which follow fairly often an injection of even 0 gr. 10 centigr. of calomel—giving rise to troubles possibly more serious than the specific manifestations which we are trying to cure.

From what precedes, we may draw certain practical conclusions in the direction of modifying the treatment of grave syphilitic troubles by increasing the doses, and by increasing the quantities of soluble salts or calomel introduced into the organism. We may, like MM. Robin and Lemoine, employ benzoate of mercury in daily doses of from 0 gr. 05 centigr. to 0 gr. 08 centigr., or, like M. Lépine, the biniodide in doses of 0 gr. 06 centigr. If we prefer to employ the sublimate or cyanide, we must bear in mind that these salts contain more mercury, and should be administered in doses rather less by one-half than those of the biniodide and benzoate. I have recently prescribed the cyanide in daily doses of 0 gr. 03 centigr.

Generally, when we desire to give mercury in doses as strong as those I have just mentioned, it will be preferable to inject the soluble salts, because it will be easier to stop the absorption of the mercury should stomatitis or general phenomena of a toxic origin supervene, or should the kidneys be affected to such a degree as to compel the treatment to be suspended. Nevertheless, I should not be surprised if it were found to be of great advantage to employ calomel in the dose in which it was formerly prescribed, of 0 gr. 15 centigr. or 0 gr. 20 centigr. per week. But instead of making a weekly injection, two injections, one of 0 gr. 07 centigr. or 0 gr. 10 centigr. each week might be made. In this manner the sudden and forcible action of calomel will be rendered available, and there are certain cases, of tabes for example, in which special advantage attends the injection of insoluble compounds, injections of soluble preparations being a very painful method of treatment for the patient.

Let us now examine the conditions under which large doses of mercury are indicated. It is evident that in all cases in which the syphilitic troubles yield to the usual doses we must continue to employ them. But we must prescribe larger doses (*a*) when mercury is administered as a means of diagnosis; (*b*) when experience shows that the ordinary doses are not curative; (*c*) in every case in which, not knowing the necessary dose, we have to treat a patient suffering from troubles which require to be cured rapidly and completely; in other words, when a normal dose might be insufficient to prevent irremediable mischief. Let us take, for instance, the case of a patient suffering from cutaneous complications, such as palmar or plantar lesions, tuberculo-gummatous lesions, spreading eccentrically, or even lingual troubles of syphilitic origin. These cases are incurable by the ordinary mercurial treatment; they are, therefore, cases in which the doses must be increased. Generally the injection of 0 gr. 10 centigr. is sufficient; while, if we prefer to inject soluble salts, we employ the sublimate or cyanide (0 gr. ·02 centigr. at least), or the benzoate (in doses of 0 gr. 0·4 centigr.), instead of keeping, as is usual, to injections of 0 gr. 01 centigr. of cyanide or benzoate daily. If the lesions resist we may still further increase the dose. We can act in the same manner with more deeply-seated lesions, such as osseous or articular lesions. When, however, the question of time is of secondary importance, we must only give the strong doses after trying the effect of the usual doses.

In lesions of the nervous system we ought always to employ maximum doses, especially in the manifestations which everyone recognises to be syphilitic, since it is necessary to give sufficient doses in order to prevent the appearance of grave troubles, and we must not wait till these troubles appear and then perceive that we have not acted with sufficient promptitude.

The maximum doses ought also to be employed in tabes, general paralysis, and other affections of the nervous system, which M. Fournier described as parasyphilitic. In my opinion tabes and general paralysis, along with other "parasyphilitic" affections, are distinctly syphilitic diseases, amenable to mercury, on condition that the treatment is started soon enough, and with sufficiently high doses.

Among the unsuccessful results of the mercurial treatment, some are due to (*a*) the fact that perhaps cases of general paralysis and tabes are not invariably of syphilitic nature and origin; (*b*) the fact that in tabes and general paralysis we often, I should say nearly always, begin the treatment too late; also, because owing to a frame of mind which I cannot quite understand, which induces neurologists and even syphilographs to do their best to bring forward evidence of unsuccessful results and drawbacks of the treatment, we are led to believe that a tabetic or paralytic subject cannot be cured by this treatment, although successful cases of this treatment have been freely adduced.

I believe the unsuccessful results of the mercurial treatment in cases of tabes and general paralysis are especially due to inadequate treatment. Dr. G. Ballet made a statement at the Congress of Toulouse, which merits special attention. "We have," he says, "no success in tabes and general paralysis treated by the mercurial methods. I mean those treated by syphilographs. I assert, that to practise daily frictions with 4 grammes of blue ointment, in patients suffering from nervous syphilitic troubles, is to employ an inadequate treatment, and this treatment is peculiarly inadequate when we have to do with diffuse syphilitic lesions, such as those of tabes and general paralysis. In these affections, the mercury ought only to be prescribed in injections, and, as a general rule, we ought to employ doses of 0 gr. 03 centigr. or 0 gr. 04 centigr. of strong salts (cyanide or sublimate), of from 0 gr. 06 centigr. to 0 gr., 08 centigr. of feeble salts (benzoate or biniodide). In the future we may possibly use still more energetic means. We might also try to make two injections per week of calomel, in doses of 0 gr. 07 centigr. or 0 gr. 10 centigr. each."

I have not exhausted the list of modifications which the mercurial treatment might advantageously undergo. It may be that the remarkable action of calomel in tolerably small doses may lead to our making a single injection of a soluble salt in a very large dose, waiting for the mercury to be eliminated before the dose is repeated. The question of intravenous injections must remain open, the doses employed by Dr. Abadie not permitting us to estimate the superiority of the method.

I may conclude by stating that mercury may be employed more energetically than has been usually done, without any actual danger to the patient, for the cure of grave syphilitic troubles, and that we shall in this manner doubtless obtain results which were formerly denied to us.

LYSOFORM: A NEW ANTISEPTIC.

By F. W. TUNNICLIFFE, M.D., and
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The chief desideratum of an antiseptic is that it shall possess adequate germicidal powers, and yet at the same time not be an active poison to the higher animals. The importance of this latter property comes into consideration with regard to the use of an antiseptic in two distinct ways. In the first instance, it may be often desirable to obtain the germicidal action of an antiseptic in the living body. As an example of this, the internal use of antiseptics in pulmonary diseases and certain intestinal conditions may be cited. It is obvious that, however great the germicidal power of a given antiseptic may be, if it is an active poison its employment for the above purposes is much limited. Further, an antiseptic is often required for local application in the living body, as, for instance, in the disinfection of suppurating cavities, &c. In the choice of such a substance not only its germicidal power but also its relatively non-poisonous nature must be taken into consideration. Again, supposing an antiseptic be simply required for household disinfection or for rendering innocuous some pathological product, entirely outside the body, such, for instance, as tuberculous sputum or typhoid stools, it is of great advantage to make use of some agent which is not an active poison. More especially is this the case if the antiseptic in question possesses not only germicidal but also deodorant properties. *Pari passu* with the education of the public concerning the *vera causa* of zymotic disease is the domestic use of antiseptics increasing; one result of this is that the use of antiseptics is falling more and more into the hands of a public untrained in scientific method, and often entirely unaware of the, in many cases, highly poisonous nature of the antiseptic they are employing. Consequently, domestic antiseptics are often left about in homes carelessly, and are not seldom the causes of accidental poisoning. The frequency of such cases led to an order of the Privy Council some two years ago to the effect that all preparations containing more than 3 per cent. of carbolic acid or its homologues should be regarded as poisons. It is obvious that the use of a non-poisonous antiseptic, if such could be found, would do much to prevent the occurrence of such cases. Speaking generally, however, although the protoplasm composing the bodies of different bacteria differs sufficiently not only from that of higher animals, but also from that of other morphologically similar germs, as to render the power of any given antiseptic different in the case of different bacteria, yet nevertheless the most active antiseptics known are active general protoplasmic poisons, and conversely those antiseptics which are not active poisons are, speaking generally, possessed of less pronounced antiseptic power. The difference essentially, however, between a very powerful antiseptic and a less powerful one is that to obtain a given germicidal result one has to use more of the latter than of the former. This resolves itself ultimately into a question of expense. What one has therefore practically to decide is whether it is not worth while to pay relatively more for a substance which is non-poisonous in the quantity required for use, and with which accidents of all kinds must be exceedingly rare.

In the choice of an antiseptic regard must also be had to its effect upon the special senses. One of the most powerful antiseptics known is formic aldehyde, or as it comes into commerce in the form of a 40 per cent. solution, formalin. This liquid is, however, so irritating to the nose and eyes and all mucous membranes with which it may come into contact, that its sphere of usefulness is greatly curtailed. The same may be said of many of the carbolic acid preparations which possess a very penetrating and disagreeable odour. The special uses to which we may wish to put an antiseptic may also lead us to give preference to certain antiseptics having definite physical properties. For instance, no one objecting to the smell of iodoform would use this substance as a deodorant. Again, a very common use of antiseptics is to disinfect the skin, and for this purpose those antiseptics which form a lather when rubbed on the skin have a great advantage over others, for by them, in that they can more easily gain access to the epidermis, the skin can be much more perfectly disinfected.

It will be seen from what follows to what extent the new antiseptic, lysoform, fulfils the above conditions, and hence for what purposes it will be especially useful.

Lysoform owes its antiseptic power to its formic aldehyde moiety. The enormous germicidal power of formalin may to some extent be appreciated if we call to mind the fact that one part in ten thousand of this substance exerts a powerful germicidal action, and that even one part in forty thousand will prevent for a considerable time the souring of milk. Lysoform may be regarded as a formic aldehyde soap, and is a colourless somewhat viscid liquid, superficially very similar to glycerine. It is miscible with water in all proportions, such solutions have, however, a tendency to become somewhat turbid on standing. The formic aldehyde contained in it is almost somewhat volatile, hence neither lysoform nor its solutions should be heated above 100° F. It is important, therefore, that solutions of lysoform intended for use should be freshly prepared. It has an agreeable odour, and the formalin it contains is almost completely masked, being just discernible on deep inspiration by a slight tickling, which it produces at the back of the nose or mouth. Undiluted, and rubbed well on the hands, a soap is formed with decided cleansing properties, but when used in this concentration formaldehyde vapour is evolved, and can readily be perceived. If diluted with an equal quantity of water, *i.e.*, if used in a 50 per cent. solution, the same soap is formed with cleansing properties, and the evolution of formic aldehyde is not sufficient to be in any way objectionable. If used in still greater dilution a soapy lather is also formed, and the aromatic smell of the compound is alone perceptible. Even when used undiluted lysoform produces no numbness, tingling or subsequent roughness or peeling of the skin. This property of soap formation, together with its unirritating qualities, should render lysoform valuable for skin disinfection.

Deodorising Properties.—Lysoform has a powerful and rapid action as a deodoriser. One c.c. of a 10 per cent. solution immediately and completely destroyed the odour of 20 c.c. of putrid broth, and 2 c.c. of the same solution acted similarly upon 20 c.c. of foul and putrid milk. In other words, it acted in both these cases as an efficient deodoriser in the proportion of 1 in 200 and 1 in 100 respectively.

Action upon Mucous Membranes.—One of the uses of an antiseptic is obviously as a gargle or irrigating fluid for mucous cavities. Lysoform can be used for this purpose without causing any irritation in strengths varying from 1 to 4 per cent. This corresponds approximately to a strength of from one to six teaspoonsful to the pint. Stronger solutions may be used with the less sensitive mucous membranes.

Germicidal Action.—In order to test the germicidal action of lysoform the following method was employed: A fresh surface-agar culture of the micro-organism to be tested was prepared. A little of the growth was emulsified in some sterile distilled water so as to produce a slightly opalescent emulsion. Measured quantities of this emulsion were then mixed with measured quantities of a solution of lysoform in sterilised distilled water (5, 10, or 20 per cent.), so as to form a definite percentage of lysoform in the mixture. Thus, for a 5 per cent. mixture equal volumes of emulsion and of 10 per cent. lysoform solution were mixed together. The mixture was well shaken and then allowed to stand and at timed intervals three platinum loopfuls of it were sown into tubes of sterile nutrient broth, and these inoculated tubes subsequently incubated. If the organism had been killed by the antiseptic no growth ensued in the inoculated tube, and the broth remained clear; but if the organism had not been killed, growth took place and the broth became distinctly turbid. Sterile test tubes, pipettes, distilled water, &c., were used throughout and the results controlled.

The organisms that were used for these experiments were the typhoid bacillus, the bacillus coli, and the staphylococcus pyogenes aureus. It would be superfluous to give the full experimental protocols of this research; the conclusions arrived at, however, are as follows. The typhoid bacillus is killed by a 5 per cent. solution of lysoform in between five and ten minutes. The bacillus coli is killed by the same strength solution in between ten and twenty minutes. The staphylococcus pyogenes aureus is killed by a 5 per cent. solution of lysoform in a little over an hour. From these results, the general conclusion can be drawn that lysoform acts as an efficient germicide when used in the strength of a 5 per cent. solution, or approximately six teaspoonsful to the pint. In this strength it has no irritating properties either upon the skin or mucous membranes, and makes, when rubbed on the skin, a good lather.

Pharmacology of Lysoform.—As has been said above, the active constituent of lysoform is formic aldehyde. It is a well-known fact that, although this substance is one of the most active antiseptics known, and combines energetically with many organic substances, especially proteids, yet, nevertheless, to the higher animals it is relatively non-poisonous. A spoonful of formalin, taken apparently raw, was not fatal. The only case of poisoning from formic aldehyde reported up to 1901 (the original account of which we have never been able to find) was after 2·5 grammes of this substance taken at one dose. Recently formic aldehyde has been introduced directly into the blood of patients continuously for some time without any poisonous symptoms accruing. The compounds and modifications of formic aldehyde seem to be practically innocuous; for instance, Trillat gave the polymerised solid modification of formic aldehyde in drachm doses to patients without any poisonous symptoms. Aronson records similar experiences with paraformaldehyde. An ammonium compound of formic aldehyde, viz., urotropin, is given largely in medicine as an urinary antiseptic in considerable (ten grains) doses. As far as we have been able to ascertain, the formic aldehyde compound contained in lysoform has a very low toxicity either when given by the mouth, or injected either under the skin or into the peritoneal cavity. In the case of kittens the lethal dose was from 1·5 to 2 c.c. pro kilo body weight when injected into the peritoneum. We never succeeded in poisoning a kitten by this substance per os; when large doses were given the animal vomited and appeared in this way to avoid poisoning. Under these circumstances it would be very difficult for poisoning to occur with this substance, and it may correctly be described as belonging to the class of non-poisonous antiseptics, though, of course, the term non-poisonous is always a relative one. Further, should by any possibility a large quantity of lysoform be swallowed and vomiting not occur, the treatment indicated would be to give the patient ammonium acetate and subsequently an emetic.

Clinical Uses of Lysoform.—From the above facts it is obvious that lysoform will be likely to recommend itself as an antiseptic for clinical purposes, and to those who intend to make a trial of this substance the following directions for use will perhaps be of help. As an antiseptic mouth or nose wash it should be used in the proportion of from one to three teaspoonsful to a pint; as a vaginal or uterine douche in the strength of from four to six teaspoonsful to a pint; for abscess cavities, suppurating sinuses, &c., up to six teaspoonsful to the pint or stronger; for disinfecting the hands or instruments, the strength should be from six to twelve teaspoonsful to the pint. For skin disinfection, the parts should be well rubbed with the solution, which will form a lather. As a deodorant, lysoform will be found efficacious in the proportion of from half to one fluid ounce to the gallon. To disinfect fæces, or other pathogenic discharges, a solution of lysoform containing half an ounce to the pint should be used. These directions are in strict accord with the ascertained bacteriological facts, but clinical experience with lysoform has shown that it exerts a marked inhibitory action upon bacterial growth in solutions of weaker strength than those recommended above; it would be well, therefore, in using this substance clinically, to begin in each case with the weakest solution mentioned above.

Conclusions.—The property which lysoform possesses of forming a lather, together with the fact that it is non-irritating and non-anæsthetic, should render it especially adapted for skin disinfection. In comparing lysoform with other antiseptics at present in use, we regard its low toxic equivalent as a distinct advantage, and likely to render its sphere of usefulness a wide one.

[For references see Tunnicliffe and Rosenheim, *Journal of Hygiene*, Vol. I., No. 3, page 332.]

ABSTRACT OF INTRODUCTORY ADDRESS
DELIVERED AT THE
OPENING OF THE WINTER SESSION AT THE ROYAL VICTORIA HOSPITAL, BELFAST.

By W. B. McQUITTY, M.A., M.D.,
Assistant Physician.

After cordially welcoming the students in the name of the staff the lecturer proceeded to discuss the inferior position accorded to medicine in comparison with the professions of Divinity and Law, and gave as reasons the association in former times of superstitious credulity with the practice of medicine, and the idea that any profession which necessitates the performance of manual work must *ipso facto* be regarded as inferior to the purely literary occupations. The attitude of the medical profession towards the study of preventive medicine was next taken up, and the fact dwelt upon that sufficient credit had not been given to its members for their disinterested action in successfully endeavouring to stem the current of disease with the necessary consequence of reducing the amount of work available for them.

The necessity for precision of observation was urged upon the student, and illustrations of defective and acute observation adduced. The inestimable importance of case-taking was especially emphasised and attention drawn to the fact that progress in medicine dated from the time of Sydenham, when clinical histories were first regularly taken.

Since the close of the summer session, remarked the lecturer, a noteworthy and an epoch-marking event had taken place in the medical history of Belfast. His Majesty the King had conferred the dignity of knighthood upon the senior physician whom they were all gratified to be able to address as Sir William Whitla, and to whom they now tendered their hearty congratulations. So far as the medical profession is concerned, this honour was without precedent in Belfast, where hitherto such distinctions have been almost exclusively reserved as rewards for political or municipal services. Whether they regarded Sir William Whitla's reputation as a writer, his eminence and skill as a physician, or his munificence to his profession in the gift of the Medical Institute now rapidly approaching completion, it was a matter of universal agreement that the honour had been well earned and worthily bestowed. Granted as it had been on personal grounds, and not because the recipient happened by the accident of chance to fill some public office, it is all the greater honour to the profession in Belfast, and, indeed, in the province of Ulster. Up to the present in Ireland, professional knighthoods, if he might use the expression, had been awarded only to practitioners in Dublin, but he hoped it was not too much to expect, now that a precedent had been established, the northern province might receive its due proportion. He ventured to entertain the hope that at the beginning of next session Sir William Whitla might have a colleague to share his position of "splendid isolation," and that he (the lecturer) on that occasion might have the pleasure and privilege of extending his congratulations and theirs to another member of the staff of that hospital.

The present session would probably be the last opened in that building; shortly the new Hospital would be in occupation, and with the increased accommodation the facilities for teaching would be greater and the students' opportunities for practical work more numerous. The new hospital would be one factor in lightening the burden on the student, and would afford advantages which ought to enable the Belfast Medical School to keep pace with its older rivals. With regard to Queen's College, we believe he but echoed the wish of everyone present that whatever be the result of the Royal Commission now sitting, or whatever their views on the University question, they were united in hoping that one outcome of the attention focussed on higher education might be the proper equipment and adequate endowment of their college.

Clinical Records.

A CASE OF NEURASTHENIA TREATED BY SURGICAL MEANS.

By J. Stuart Nairne, F.R.C.S.,
Senior Surgeon, Glasgow Samaritan Hospital for Women.

A. B., æt. 18, was admitted to St. Margaret's Home on February 7th with distension of abdomen, hæmorrhage, &c. This is probably the earliest case in which a diagnosis of neurasthenia was deliberately concluded and a trial made of surgical means in a minor degree to meet the condition by me.

She was a very young girl, of an amiable disposition, and I look back on her case with the most vivid recollection. Her old father and mother came with her, decent country people who had never had any personal experience of neurasthenias or hysterias or anything of that sort. They said she was always ailing, pains here and there and everywhere: could do nothing: was always willing to do anything, but failed; pains in her back, pains in her side, great distension of her abdomen, rollings and rumblings of flatulence, a restless sleeper, a bad eater, with constipation sometimes of nearly a week's duration. She had been under treatment for a considerable time with tonics and purgatives, till finally it was considered a case of nerves, and both she and her parent were disheartened. Nothing seemed to do her any good. If she felt well for a little while she was bright, cheerful, and always working about. But these intervals were inconstant and short. They were all willing and anxious to have anything done at all that might make her better.

I cannot say that I was very hopeful of any treatment myself, as I was undoubtedly considerably in the dark. As can be seen there was nothing very organically to go upon. There was certainly the distension of the abdomen, but that was clearly only a symptom of some other disease. There was also the dysmenorrhœal pain of which she complained, but that was not particularly excessive, and the diagnosis of ovarian and tubal disease was made more as a tentative or possible condition from the symptom. She was a virgin, and an examination under chloroform in that condition is deceptive unless there is gross organic disease of the appendages.

In any case, she was an exemplary patient while in the Home—had very few attacks of pain—and made few complaints. Of course she was resting all the time, which was very much in her favour.

When she was dismissed on March 12th, she was much better altogether, and I, as well as her parents, had good hope that the improvement would continue. It did so for a few months, and then she became worse than ever. And I am sorry to say more than ever all those about her, with the steadfast exception of her father and mother, reckoned that she was putting it on, that she was not so bad as she pretended to be, that she could help it if she liked, and so on.

Perhaps I, too, had a kind of half idea that there was an element of voluntary deception in the matter, but I did not say so. I am saying so now, because I am so sure now that I was absolutely wrong, that the apparently voluntary part of it was the involuntary automatic connection between her physiological and psychological condition, and that there was no more a separate voluntary action on her part than there is on the part of the governors on an engine, when the safety valve is pressed open by excess of steam.

She was therefore readmitted on May 12th, 1891, and dismissed on the 23rd of the same month.

She was only under observation during that period and although her record of residence was again favourable I made up my mind to advise a major operation if she again relapsed. I did so on grounds which I fully explained. I said that I believed that there was a deep-seated organic disease at the bottom of all her symptoms. That, as she was now suffering from distinct ovarian pains and abdominal tenderness, the most effectual method of dealing with them would be by means of an abdominal section, and then acting according to whatever internal conditions might be found.

She was then dismissed. It was not long till she was worse than ever, and she was re-admitted on November 15th, 1891, for the purpose of major operation.

I am detailing this case at large not because I consider that I had any special credit by it, but because its lessons sank deep into my heart, and because, as I said, it was the first where I had deliberately, after diagnosing a so-called neurasthenic affection, called in the aid of surgery.

The operation was done. I was very anxious not to sterilise the patient if it could be avoided; and examined both ovaries and tubes carefully. Both sides were affected. The ovaries were cystic, and the tubes were inflamed and thickened, the fimbriæ were œdematous. It was difficult to choose between them if one set only was to be removed.

I then discovered that the appendix vermiformis was enlarged, apparently under an acute attack of appendicitis. It was quite loose. That decided me. I removed the appendix and the ovary and tube on that side, and punctured all the cysts I could find in the left ovary. She made a very easy recovery and was better. She went home, and at first I had delightful news. Everything seemed to be going on well. Menstruation had continued at first without pain, and if she had then passed totally from my sight I would have been hugging the delusion that she had been cured.

As it was, however, I learned subsequently that she had relapsed, at first slowly, then more rapidly, till she became as bad as, or worse than, ever, and ultimately died, at no long interval, under the care of Dr. McFarlane, of Busby, I understand.

Now I am sure, having pondered much over this case, that I did too little, and that it is quite possible, had I done more, the ultimate issue would have been different. And what I argue from is this: the uterus itself partook of the general congestion; but it had also the special rigidity to which I have referred so frequently, and while an ordinary metritis may naturally be considered to subside under a simple blood-letting process, this kind of condition, dependent, as I think it is, on immediate or remote nerve irritation, can only be dealt with in a manner that radically deals with the nerves. Hence I think I ought certainly to have removed both uterine appendages completely—not sparing the cornua of the uterus.

At any rate, if I had the same indications now I would carry out the plan as I have stated.

Anthrax in Bradford.

ANOTHER inquest was held last week in Bradford on the body of a man who had died of anthrax contracted in the manipulation of inferior mohair. It transpired that during the preceding fortnight six other men had been away ill, and one of them had since died of the disease. The constant recurrence of this extremely fatal disease affords indisputable evidence of the inadequacy of the precautions at present enjoined, and further measures to protect workpeople are urgently called for.

Transactions of Societies.

CLINICAL SOCIETY OF LONDON.

CLINICAL EVENING.

MEETING HELD FRIDAY, OCTOBER 24TH, 1902.

MR. HOWARD MARSH, F.R.C.S., President, in the Chair.

PRESSURE PARAPLEGIA SUCCESSFULLY TREATED BY COSTOTRANSVERSECTOMY.

MR. J. JACKSON CLARKE showed a girl, æt. 4, weakly and thin, who was admitted with an angular projection in the upper dorsal region of the spine, and loss of power in the lower extremities. Treated by complete rest in bed and fixation of the spine, abundant food, air, and cod-liver oil for eight months; the paraplegia had, with slight fluctuations, steadily got worse, and was accompanied by marked wasting of the limbs. A skiagram showed a round area of darkness with its centre opposite the fifth dorsal vertebra believed to be tuberculous and inflammatory infiltrations, and the operation described by Ménard in 1894 was carried out on January 15th, 1902. The right transverse process of the fifth dorsal vertebra and the neck and head of the corresponding rib were removed, and some iodoform-glycerine-carbolic emulsion injected. The immediate result of the operation was that the previous limp and powerless condition of the limbs was replaced by a slight degree of spasticity. This passed off in a few days, and the condition was again the same as had been observed before the operation. Seven days after the first operation the track leading to the pre-vertebral tuberculous area was again opened up under an anæsthetic and scraped; this time a tube was inserted so that a little of the emulsion could be injected daily. Again the slight spastic condition showed itself, but this time the voluntary movements improved also, the child at first being afraid to move her limbs owing to the excessive and painful spastic response. The spastic condition soon began to pass away, and the voluntary power steadily increased. The patient has now been running about in a totally normal way for some months. The deformity of the spine has been lessened by the mode of fixation employed.

CONGENITAL SHORTENING OF ONE RECTUS ABDOMINIS MUSCLE.

MR. J. JACKSON CLARKE also showed a girl, æt. 10, who originally presented a congenital shrinkage of the right rectus abdominis muscle. The muscle was divided by open operation, and the previously kyphotic spine was over-extended, and during this proceeding the divided ends of the altered (fibrosed) muscle separated for three inches within the sheath. The gain in mobility of the spine and in respiratory power had been marked.

TWO CASES OF FAMILY PROGRESSIVE SPINAL MUSCULAR ATROPHY (WERDIG-HOFFMANN TYPE).

DR. F. E. BATTEN showed (1) a boy, æt. 7, who was strong and healthy until twelve months of age. From that time onward progressive wasting of the thighs and weakness of the legs was noticed. He talked at eighteen months, and is very intelligent. He was the sixth of eight children. He was unable to rise from chair or ground. Wasted thighs. Weak dorsal muscles. Small trapezius. Wasted upper part. Marked weakness of flexors and extensors of the thigh; weakness of flexors and extensors of the knee. Wasting and weakness below the knee, not nearly so much as above the knee, but still considerable weakness of extensors of foot. Knee-jerks absent. Plantar flexion. No anæsthesia. No reaction to strong faradism in affected muscles. Muscles of arm react well. His sister, æt. 1½, showed wasting of legs first noticed when twelve months old. When six months old was strong, healthy child; she could stand, and walk up to her mother. Since twelve months old the legs have steadily wasted, and now the child is unable to stand, and is so weak that she moves her legs with her hands. *Present Condition.*—Intelligent, well-developed arms, wasted and weak thighs and gluteal muscles. Muscles below the knee fairly good. Knee-jerks absent. No anæsthesia.

CASE OF LEPROSY UNDER TREATMENT.

Dr. T. D. Savill showed a boy, æt. 16, who was born in Demerara, and came to England when eleven years old, suffering from leprosy, which had started at ten years of age with slightly raised erythematous and pigmented patches, most of which were anæsthetic. When last exhibited the patches were no longer raised, but over arms and legs and face were many pigmented, ovoid patches. Both ulnar nerves, and especially the left, were thickened. Under treatment by Chaulmoogra oil all anæsthesia and nerve thickening has gone, and all pigmentation and erythema has disappeared. There only remain slight indications on the face, which are hardly visible to the naked eye.

CASE OF EXTENSIVE WASTING OF THE TYPE OF FACIAL HEMIATROPHY.

Dr. Harry Campbell showed a woman, æt. 26, in whom, since twelve years of age, the right leg began to waste, and the wasting has steadily progressed since. On the inner part of the right thigh just above the knee, and on the dorsum of the right foot in the neighbourhood of the first interosseous space, there is discolouration and pronounced atrophy of skin and subjacent tissues. A similar discolouration, or mottling, is observed in the corresponding regions of the opposite limb. Similar mottled patches, sometimes with decided atrophy of the skin and underlying soft parts, are present in other parts of the body, *e.g.*, on the right upper lip, over the right scapula, and on the left side of the waist. The right eyeball is retracted, and the right pupil smaller than the left: it reacts to light and accommodation, and only slightly dilates under cocaine. Over the right parieto-occipital region the hair comes out readily, and pain is sometimes felt here. The tendon-jerks are active in the lower extremities; a doubtful Babinsky's sign has been obtained in the right foot. Besides the right-sided headache, patient has for the last few years had considerable pain in the right leg above the knee and over the anterior tibial region. There is no anæsthesia, but pronounced hyperæsthesia over atrophied patch on the right foot. The electrical reactions are normal.

A CASE OF LOCOMOTOR ATAXY WITH ATROPHY OF THE BONES OF THE FEET.

Dr. Thos. H. Kellock showed a man, æt. 40, who three years ago began to suffer pain in his feet, and had some ulcers on them, from one of which on the left foot a small piece of bone came away. Up to that time he had noticed nothing wrong with the shape of the feet, but from that time onwards this began to change, and they became shorter and deformed. In March, 1902, when much "run down," he had ulcers in the soles of the feet, and was taken seriously ill with great pain in the abdomen and constant vomiting. This lasted ten days, and after a few weeks he went back to his work (manager at a restaurant), but has had to give this up again recently, as he feels so weak. A truss which he has been wearing for inguinal hernia has caused an unhealthy ulcer over the sacrum. The patient has fairly well-marked symptoms of locomotor ataxy. The feet show old and recent trophic ulcerations, and most of the metatarsal and phalangeal bones appear atrophied and shortened.

DISPLACEMENT OF THE HEART DUE TO LONG-STANDING PLEURISY.

Dr. Raymond Crawfurd showed a girl, æt. 15, who, when eight months old had a severe illness, said to be "dry pleurisy," which left her very thin and weak till three years old. At times the face is distinctly cyanosed, and the finger-tips are a trifle blunt. The left side of the chest is hyper-resonant, and the area of cardiac dulness is absent. Stridor is felt and heard all over this side, gradually diminishing in intensity towards the base. At the level of the fourth rib in front absolute dulness begins, and passes outwards to the level of the sixth dorsal vertebra behind; over this area, particularly behind, are heard cavernous breathing and loud gurgling *rales*. The heart's impulse was best felt in the fifth right interspace in the mid-axillary line.

RECOVERY AFTER REMOVAL OF ADENOMA OF KIDNEY.

Mr. J. D. Malcolm showed a child, æt. 11 years 10½ months, from whom an oval tumour of the right kidney was removed ten years ago, on November 15th, 1892. The growth with kidney measured six inches in length, and was described as a malignant adenoma. The patient shown had had no serious illness, and has enjoyed good health since the operation, but has remained rather paler than her brothers and sisters.

HYPERTROPHIC CIRRHOSIS OF THE LIVER (SYPHILITIC? WITH CHRONIC JAUNDICE AND XANTHOMA.

Dr. F. Parkes Weber showed a woman, æt. 54, who presented great uniform enlargement of the liver which formed a rounded tumour-like projection in the abdomen, rather hard to the touch, and extending into the right iliac fossa. The spleen can be felt moderately enlarged. There is jaundice with a certain amount of chronic pigmentation of the skin, as in all cases of very chronic jaundice, also xanthoma (tolerably symmetrical) of the eyelids, front of face, sides of the neck, flexures of the elbow and finger joints and umbilicus. The enlargement of the abdomen has probably existed for eight or nine years, but has become much more striking during the last two years. The jaundice has apparently only been noticed for about twenty months, and the xanthoma for four months. There is no evidence of alcoholism, but there are scars on the legs almost certainly due to syphilitic gummata. A dragging pain is sometimes felt in the right side, but there is nothing pointing to cholelithiasis. There is no family history of chronic jaundice. The degree of jaundice varies much from time to time. A great improvement has recently taken place in the patient's general condition, independently of any specific treatment, and the jaundice has become very slight. The itching, which is sometimes intolerable, has likewise much diminished. The fæces are well coloured, and the urine contains no bile, though on addition of nitric acid it becomes darker, and then spectroscopic examination shows two absorption bands, apparently corresponding to urobilin and uroroseïn. The patient is now under antisyphilitic treatment. It is probable that the liver disease was started by syphilis, but it is doubtful whether the change in the liver should be regarded itself as chiefly syphilitic, or rather as a form of Hanot's disease started by syphilis, but perhaps in a person predisposed to biliary forms of cirrhosis (cholæmic diathesis of French authors).

A CASE OF HERPES ZOSTER, QUICKLY FOLLOWED BY FACIAL PARALYSIS.

Dr. Stanley Barnes showed a man, æt. 40, an in-patient at the National Hospital, Queen Square. He had never suffered from ear disease, and his previous health was good. On September 30th of this year he was exposed to cold, and next day noticed a few "pimples" on the right side of his neck. By October 3rd the rash was fully out, but he had no pain. He did not feel at all ill, and continued at work, but on October 8th found the right side of his face was paralysed. On admission to hospital next day there was a profuse herpetic rash over the third and fourth cervical distribution on the right side, and this area of skin was slightly analgesic. There was no pain. There was complete right facial palsy, the platysma also being involved. The electrical reactions were normal. Taste was lost on the right side of the tongue, front, and back, but was preserved on the left side. There was some dulling of the sense of hearing, especially of hearing musical notes, on the right side; bone conduction was good, and conversation was easily heard. The membrana tympani was normal, and there was no ear discharge. The general health was quite good. By October 22nd the rash had dried up and the facial paralysis was improving, the frontalis and platysma particularly showing signs of return of voluntary movement. The electrical reactions were still normal. Hearing and taste were quite normal again.

ULCER OF TONGUE.

Dr. McGavin showed a small boy who, when first seen, presented an ulcer on the dorsal surface of the anterior third of the tongue, not indurated, but very hyperæmic, covered with a wash-leather slough, with moderately-enlarged soft glands at the angles of the jaw. He presented no signs of syphilis and there was nothing pointing thereto, no constitutional disturbance and no history of struma. Under iodide of potassium the ulcer had dried up and was rapidly healing.

HARVEIAN SOCIETY OF LONDON.

A clinical meeting of this Society was held on October 16th, Mr. Watson Cheyne, F.R.C.S., President, in the Chair.

Obscure Cutaneous Lesion in an Arthritic Subject.—Dr. A. Morison showed a girl, æt. 8, who was admitted to the Paddington Green Children's Hospital in March with rheumatic arthritis and endocarditis. Shortly after admission she developed a persistent erythematous state of the skin, spreading in ring form and affecting only the trunk. The condition was probably vaso-motor, not parasitic. In May the child was sent to a convalescent home at Slough; whilst there an attack of rheumatic arthritis occurred with a recrudescence both of the endocarditis and surface erythema. The child returned to the hospital with organic mitral reflux. Dr. Morison believed that the endocarditis and vaso-motor skin changes were due to the same blood state or micro-organism, and suggested that rheumatic chorea was probably due to such vaso-motor changes in the cerebral circulation as were visible on the skin. Dr. Morison showed a second case of a boy to illustrate the insidious onset and progress of endocarditis.

Acute Suppuration in Both Knees.—Mr. Raymond Johnson brought forward the case of a boy, æt. 12, who had recovered from acute suppuration in both knee-joints. The source of infection was uncertain, but there had been otorrhœa for two years. The pus from the joints yielded a pure culture of streptococcus pyogenes. The right knee, the first affected, was opened and drained, subsequent incisions being made into abscesses which extended beyond the joint. On account of the unsatisfactory progress of the case he had just decided to amputate when suppuration occurred in the left knee-joint; amputation was deferred, and the left joint was freely opened and drained. After a long period of irregular fever, the patient recovered with free movement in the left knee-joint, and also a fair amount of movement in the right joint. Antistreptococcic serum was used in this case without apparent effect. Short drainage tubes of large calibre were used, the joint was firmly fixed, and passive movement was commenced as the suppuration ceased, and even before the incisions were healed.

Case of Thrombosis (?) of Basilar Vessels.—Dr. L. Guthrie showed a woman, æt. 28, who presented the following symptoms: Dilatation and inaction to light of the left pupil, paresis of left superior rectus, partial anæsthesia of left side of face and neck; tremors of both hands, especially of right, marked Romberg's symptom, and a somewhat staggering gait; exaggeration of knee-jerks, but no ankle clonus, plantar reflexes absent. In August, 1900, she had for the first time an epileptic fit lasting twelve hours, no fits since. For nine months afterwards she had severe headaches and vomiting, usually on getting out of bed. These attacks had now ceased. The symptoms pointed to a lesion in the floor of the aqueduct of Sylvius, affecting the centres for the sphincter pupillæ and of the superior rectus. The other symptoms suggested a lesion of the corpora quadrigemina, probably vascular, and due to thrombosis of the basilar vessels. About three years before the first symptom she suffered from a severe sore throat. The soft palate now showed considerable scarring. Her present condition is probably due to the effects of syphilis.

Dr. Guthrie also showed a woman, æt. 44, with Argyll-Robertson pupils, intense atrophy of the optic discs, loss of knee-jerks, but no other signs of tabes.

Tuberculous Fæcal Fistula of Cæcum.—Mr. Roughton showed a man suffering from a fæcal fistula in connection with tuberculous disease of the cæcum. The fistula was of a year's duration, and resulted from an exploratory operation. Although his general health improved greatly he suffered so much inconvenience from the fæcal discharge that he was compelled to seek further treatment. Mr. Roughton had effected an anastomosis between the ileum of the transverse colon by simple suture. Recovery from the operation was uninterrupted. The fistula was not yet healed, but there was now no fæcal discharge.

Extensive Alopecia.—Dr. Eddowes showed two brothers, who occupied the same bed; the younger having almost total alopecia of nine years' duration. The elder, æt. 30, having three round patches on the scalp. The most recent patch, when pressed upon, showed active seborrhœa. Microscopic examination of hairs from both patients presented exactly the same kind of organisms, and pointed not only to the contagious nature of the disease, but showed how the hair died, and how the organisms rendered the hair brittle, and produced the well-known club-shaped stumps. The organism was described as occupying a position between cocci and the fungus of ringworm. It might be termed a bottle bacillus (Unna). He had no doubt about the infective nature of this particular form of alopecia.

Dr. Cautley, Dr. Sutherland, Dr. W. J. Harris, Mr. Watson Cheyne, Mr. T. C. English, and Mr. Jaffrey took part in the discussion of the cases.

SOCIETY FOR THE STUDY OF DISEASE IN CHILDREN.

Meeting held October 17th.

Dr. G. A. Sutherland in the Chair.

Mr. W. M. Burgess (Harlesden) showed a boy, æt. 4½, who had been treated for a capillary nævus on the left side of the neck by nitric acid and by the actual cautery.

Mr. Francis Jaffrey preferred excision as a treatment for nævi, unless they were situated round the orifices.

Mr. Walter Edmunds relied upon the electric point for their treatment on the face, and considered that Mr. Burgess's result was good.

Mr. Albert Carless also thought the result satisfactory, but he preferred excision. He called attention to nævi which had been left alone and which had remained quiescent for years, but which suddenly burst into activity and became almost angio-sarcomatous.

Dr. C. W. Chapman spoke, and Mr. Burgess replied.

Dr. E. Cautley showed a moderately rickety boy, æt. 13 months, with great enlargement of the spleen and some enlargement of the liver. Leucocytosis was a feature of the case. Five weeks of hospital treatment failed to benefit him. He was discharged and quickly readmitted with numerous petechial hæmorrhages, and numerous myelocytes were found in the blood. He improved and was discharged in six weeks' time. When shown, the spleen was still very large, but he was not anæmic.

Dr. R. Hutchison thought the case must be placed in that group of anæmias associated with splenic enlargement, which was quite peculiar to children, and which might be termed the splenic anæmias of infancy. He had never seen more than 10 per cent. to 13 per cent. of myelocytes in the blood, and when there were a large number of these corpuscles the cases fared badly. Microscopically, as far as his experience carried him, all that could be seen was a general increase of the fibrous tissue, a condition common to many splenic disorders.

Dr. A. E. Sansom said there must be a cause for the condition, but it was a very subtle one. Evidently the child had taken some poison into his system which had produced what almost might be called "a malarial intoxication."

Dr. C. W. Chapman asked whether these cases were more prevalent among the poor than the rich.

The Chairman (Dr. G.A. Sutherland) inquired as to the prognosis, which he believed to be good in the absence of some intercurrent complaint to which such cases were liable. He was of Dr. Sansom's opinion that some poison was absorbed into the system which produced the ill effects.

Dr. Cautley, in reply, said in his experience the prognosis was good. Cases which succumbed nearly always had some other associated ailment, often tuberculosis. His case showed, he thought, that numerous myelocytes did not necessarily indicate a fatal prognosis.

Dr. Leonard Guthrie showed an infant, four months old, who suffered from dilatation of the stomach, which, he thought, was due to pyloric obstruction. The symptoms began at six weeks old with obstinate constipation and incessant vomiting, which latter had now ceased. The stomach was greatly enlarged, its lower margin extending two inches below the umbilicus, and it held fourteen ounces of fluid without causing sickness. Peristaltic waves passed across the epigastrium from left to right. The symptoms had been temporarily relieved by lavage, but now it was thought necessary to resort to an operation to obtain permanent benefit.

Dr. Cautley thought it would be interesting if Dr. Guthrie could rear the child without an operation. He suggested that he should make a further trial of washing out the stomach and prescribe a well-regulated dietary, and failing to benefit the child by these measures an incision might be made. Recently two cases under his care had been successfully treated by pyloro-plasty.

Dr. H. J. Simson narrated a case with symptoms typical of pyloric obstruction, which disappeared when a suitable diet was ordered, and the peristaltic movements of the stomach previously in evidence ceased to be noticed.

Dr. A. H. Sanson thought it an excellent case for surgical interference.

Mr. A. H. Tubby deprecated gastro-jejunostomy, and advocated pyloro-plasty.

Dr. C. W. Chapman thought that an exploratory operation could do no harm, and Dr. D. J. Armour said he did not see how any treatment short of an operation could benefit the child if it were a case of pyloric obstruction.

The Chairman (Dr. G. A. Sutherland) did not think the peristaltic waves pointed entirely to pyloric obstruction, and suggested that there was possibly some obstruction lower down.

Dr. Guthrie, in reply, said his original impression was that of Dr. Sutherland, but frequent subsequent examinations had convinced him that the peristaltic waves originated in the stomach and not in the bowels. He considered he had given careful dieting a fair trial, and he was now inclined to ask a surgical friend to assist him, and he proposed to leave the methods of procedure in the hands of the surgeon.

Dr. E. Cautley showed a girl, æt. 15 months, who had been under his care for hydrocephalus since the age of eight months, which had been arrested by repeated lumbar puncture. The hydrocephalus was secondary to basal meningitis. In all, thirty-five ounces of cerebro-spinal fluid were drawn off by repeated tappings, each being followed by a gain in weight and marked improvement of the general health. Although the hydrocephalus had been arrested the child was blind and lacking of intelligence.

Dr. R. Hutchison said lumbar puncture was recommended in America for diagnostic purposes, as well as being a therapeutic measure. He had tried it, and his results had been much more disappointing. In two children fatal collapse occurred. In resorting to permanent drainage in the lumbar region there was danger of direct damage to the brain. If tapping could be commenced earlier the blindness and imbecility might be prevented.

Dr. White narrated the methods he had adopted to draw off the fluid from Dr. Cautley's case.

The Chairman (Dr. G. A. Sutherland) mentioned that the treatment had been abandoned in America and Germany. He called attention to the closure of communication between the ventricles of the brain and the spinal meninges in sequence to posterior basic meningitis. He did not intend to try puncture. He had suffered a similar experience to that narrated by Dr. Hutchison in the way of sudden death following the operation.

Dr. Cautley, in reply, thought the treatment he had adopted was likely to be successful in only a few cases.

France.

[From our own Correspondent.]

Paris, October 26th, 1902.

Surgery of the Heart.

At the meeting of the French Surgical Congress, M. Terrier read a paper on wounds of the heart and the pericardium which he said were met with under three distinct forms. (1) The wound involves both the heart and the pericardium; (2), it involves only the heart, leaving the pericardium intact; (3), the lesion is in the pericardium alone.

The method adopted for opening the thoracic wall varied with the operator, but that to which he gave the preference was thoracotomy by means of an osteo-muculo-cutaneous flap.

Foreign bodies of the heart should be studied with the wounds of that organ; needles, on account of their frequency, constitute the most interesting group. The relative innocuity of punctures made into the cardiac cavities might make one believe that the introduction of a needle into the heart could have no grave consequences; such is not the case, as, according to the statistics of M. Loison, of twenty-three cases, fourteen terminated fatally, or a mortality of 60·8 per cent. The gravity of these accidents arises from the fact that the eye of the needle remains in the thoracic wall while the point is directed towards the heart, which, from its mobility, produces lesions in every direction. Consequently an accident of this kind should be always attended to and the needle extracted as soon as possible. When the needle has gone out of sight it is better to open the wall than to endeavour to reach it through an incision over the point of penetration. The radiograph is of great utility in such cases.

M. Faure said he had practised drainage of the pericardium on a patient in June last. It was the case of a man who presented all the signs of an enormous effusion in the pericardium with compression of the heart, oppression, fever, and a bad condition generally.

The incision of the pericardium gave issue to a quart of liquid, and a drain was placed. Up to the fifth day not much change was evident except that the oppression had ceased and the heart regained its rhythm; but from that day a great improvement took place, and after removing the drain the wound was allowed to cicatrise. Unfortunately, after a few days, the condition of the patient became again alarming, and over a pint of serum was drawn off, and finally, the wound refusing to heal, gave issue to purulent and fetid liquid, and the man succumbed from cachexia. The autopsy showed that it was a case of tuberculous pericarditis. But the case was interesting in the fact of the extraordinary tolerance of the heart which continued during a month to beat in an open and infected pericardium.

A Predisposing Sign of Pulmonary Consumption.

Dr. Molle, of Aubenas, has published an article in one of the provincial medical journals on the frequency of a souffle in the femoral vein in anæmia of young boys at the age of puberty. The souffle is to be found exclusively in these veins and reveals a chlorotic condition, which demands an appropriate treatment. Continuing his researches in this direction he arrived at the conclusion that the same phenomenon constituted a certain predisposition to pulmonary consumption, and cited several cases of young men about to be drafted into the Army, and in whom he had discovered this sign and who, after spending some months in the Service, were sent home with developed consumption.

An Easy Method of Passing the Stomach Tube.

Everyone knows how difficult it is sometimes for a patient or for a medical attendant to pass a stomach tube. Some patients, it is true, "swallow" it after a little practice quite easily, while others find it absolutely impossible, and most likely belong to the same class who cannot swallow pills. To obviate the difficulty and to conquer the nervous contraction of the pharynx, an American *confrère* advised refrigeration of the end of the tube by chloride of ethyl, but Dr. Montagnon, of St. Etienne, adopts a much simpler method, and which succeeds in every case. He gets the patient to fill his mouth with water, and then slips in the tube, rapidly passing through the water to the pharynx; at this moment the patient makes a motion of deglutition to swallow the water, and the tube is carried down with it; the remainder of the operation is easy.

Germany.

[from our own correspondent.]

Berlin, October 25th, 1902.

Although so much has been written on

Surgical Shock,

an account of some recent observations recorded by Dr. D'Anna in the *D. Med. Zeit.* may not be without interest. He gave an account of five cases in which the symptomatology was specially noted. Paleness of the face, slowing of pulse, lowering of temperature, cardiac weakness, and diminished sensibility were never absent, but the condition of stupor mentioned by most authors was sometimes absent; on the contrary, he sometimes observed violent agitation. Another symptom which was not constant was the involuntary evacuation from the bladder and bowels. Sometimes there was complete anuria or albuminuria. A symptom that, in the opinion of the author, is of the gravest import as regards prognosis, was singultus. He is of opinion that so long as this symptom is absent there may be some hope of saving the patient, but that this hope is cut off so soon as singultus sets in. If there is a question of performing an operation in a patient already suffering from shock he is of opinion that such an operation is permissible so long as no hiccough is present.

The same journal contains an account of a case of

Pyelitis Occurring at the End of Pregnancy

reported by Dr. M. Loeb. The patient, previously healthy, and who had had three children previously, and who expected her confinement in a few days, was attacked suddenly with a rigor, and subsequent fever, with vomiting. She had had a slight pain in the left flank before this. The rigor returned the following day, but not the day after, although the temperature rose to 39·2° C. The evening of the next day she gave birth to a strong vigorous child. The following morning she felt well, but in the afternoon she had a violent rigor lasting half an hour. The temperature was now 41° C. The patient complained of shortness of breath. She became delirious, and could scarcely be kept in bed. After cold affusion and a morphia injection she became quieter, but became restless again in an hour and required a second dose of morphia. Urine was now withdrawn with a catheter, and it contained albumen, so that eclampsia was suspected. This thought was abandoned, however, on the urine being examined with the microscope. It was now found to contain quantities of pus cells, epithelial *débris* and casts which rendered a diagnosis of pyelitis certain. Against the assumption of eclampsia were the high fever and delirium preceding the spasms. No clonic spasms attended the first attack, and the patient recovered completely.

The *Baktirsch Wratsch*, 5/1902, contains notes of a case of

Dermoid of the Bladder

by Dr. A. T. Bagaswski. The patient, a woman, æt. 33, was admitted into hospital complaining of pain during micturition. She stated that she had been eight years ill, and that she has been constantly treated for catarrh of the bladder without success. Examination revealed nothing abnormal externally except that the urinary meatus was slightly swollen. The introduction of the catheter was very painful. No calculi could be felt. On bimanual examination a hard body was felt on the floor of the bladder. The urine was turbid with an ammoniacal odour and contained pus; it was alkaline, sp. gr. 1025, and it contained some albumen. The deposits contained urate of ammonia, uric and hippuric acids and blood corpuscles, bladder epithelium, but no cylinders. On washing out the bladder three small-pointed calculi escaped. The treatment that followed was without result. Chloroform was now given and the bladder explored with the finger. A pear-shaped tumour was found on the floor of the bladder, growing from a slender stalk. The tumour was covered with hairs, and small calculi were seated on the ends of these. The tumour was removed and the bladder carefully washed out with hot boracic solution. For the first two days the catheter had to be used, as the urine was bloody and contained clots, and the bladder was washed out after each catheterisation. Internally salol 0·6 grms. and Vichy water were given. Externally, absolute rest and ice over the abdomen. The patient was quite well by the tenth day. The tumour proved to be a true dermoid with skin, hair, and teeth. It weighed twelve grammes.

The Bactericide Action of Soaps.

The *Archiv. f. Hug.* contains an account of this subject by Dr. Konradi. The author speaks of the very different opinions prevalent on the matter which render an attempt to reconcile them desirable. The author examined resorcin soap (5 per cent. resorcin and 2 per cent. glycerin), and found a marked power of resisting the development of bacteria; agar or gelatin containing 1 in 100,000 of the soap constantly remained sterile after inoculation. Anthrax spores were killed in a solution of 1 in 1,000 in four hours at a temperature of 37° C., and in twenty-four hours at the temperature of the room. The soap was not, however, a disinfectant. Further experiments showed that only soaps that contain odoriferous substances (terpineol, tanilline, cumanine, heliotropine) had any bactericide action. Inquiry showed that terpineol was especially poisonous.

Austria.

[From our own Correspondent.]

Vienna, October 25th, 1902.

Treatment of Tuberculosis.

At the Bohemian Congress Teuoer described his method of treating cases of tuberculosis in hospital instead of in sanatoria, which can be done at a comparatively small cost. He has caused to be erected a special ward, sheltered by the main building on every side except the south, which is exposed and open. In this ward the patient resides day and night in the summer time, but in the winter by day only, from six in the morning to six at night. Before exposure the body is well sponged and rubbed with cold water to harden the patient for the open air. Meals are given frequently, milk being preferred, but no alcohol, three litres being the usual quantity required—6·6 lbs. equals 105·6 ozs· or 5¼ pints, which is equal to about 15 ozs. of dry solids in twenty-four hours.

The patients usually put on 15 kilos, or 30 lbs. weight in a short time with this diet and suitable personal hygiene.

Drugs are of less consequence, although creosote and pyramidon may be given to reduce fever, while codeine and heroine may be used to quiet the cough.

Of fifty-five treated in this way he had fifteen who seemed at the present time to be perfectly well; twenty-one were greatly improved, sixteen put on flesh, and three died.

Hetol injections given after Landerer's methods are also of use, but Teuner declared that he had never seen such results as Landerer claimed to have obtained therewith.

Intra-ligamentous Fibroma.

Wenzel Pit'ha related a case of intra-ligamentous tumour complicating pregnancy. The patient was æt. 41, and had not been pregnant for the previous twenty years. Recently a tumour commenced to form in the right groin, and gradually extended into the abdomen. From the history and examination the swelling was diagnosed to be an intra-ligamentous tumour. Total extirpation of the uterus proved that in addition to the tumour that filled the broad ligament the uterus contained a fœtus in the fifth month of gestation. The uterus weighed 6½ kilos, or 14·3 lbs., and the cardiac sounds could be heard for more than an hour after removal.

Hansman related a similar instance in a school teacher, æt. 39, with all the symptoms of a fibroma of the ligament. Pregnancy had never entered into their calculations till the uterus was removed, when it was found to contain a four months' child.

Audition Olorée.

Chalupecky brought the whole subject of audition olorée before the meeting as one of those peculiar sensations belonging to the secondary class of motor movements, or a combination of hearing and seeing sensations on the same nerve, acoustic perceptions producing at the same time a particular and distinct colour.

He presented a young man who saw a different colour according to the sound that was produced in the scale. The vocal sounds, when expressing figures, days of the week, or the same tone by a bell, produced the same colour. He thought this was a congenital affection presiding in the cortical part of the brain as a hyperæsthetic condition just as temperament or genius was a neurotic implantation. We have similar conditions produced artificially with drugs such as santonin, Indian hemp—audition olorée; alcohol—acoustic hallucination by tapping the skin. In his opinion audition olorée is simply a congenital hyperæsthesia of the grey cortex of the brain.

Pemphigus Vegetans.

Samberger showed a man, æt. 59, who had previously to the present illness been always healthy and strong. The affection commenced as a simple condylomatous efflorescence rising from denuded parts of the Malphigian layer; later on vesicles appeared giving the present appearance of pemphigus foliaceus. This case supports Kaposi's theory that pemphigus vegetans is not a distinct disease, but only secondary to others.

Toxic Dermatitis.

Samberger next showed cases of dermatitis produced by the toxine from plants or from the insects found on them, such as chrysanthemum, &c. That caused by the plant *Primulio obconia* is very common. He was in favour of the theory that the dermatitis was due to the direct irritation of the skin by small particles of the secretion of the plant that was present on every part of it appearing above ground.

Rhino-Scleromo.

Kutvirt brought forward a young woman, æt. 38, who had always been healthy and came of a healthy family. Three years ago she began to sneeze, with running at the nose, which finally became blocked. There was no evidence of syphilis or injury to cause the trouble. The upper lip and external part of nose are quite normal. Within the orifice of the nasal cavity the hard tumour commenced and extended back to the choana posteriorly, while the mucosa of the pharynx was greatly atrophied. Microscopical examination revealed a scleromatous growth. The patient lived in an upland district 730 mètres above sea level, where only a small streamlet ran.

The Operating Theatres.

NORTH-WEST LONDON HOSPITAL.

Old Tuberculous Disease of Ankle-Joint.—Mr. **Mayo Collier** operated on a child, the subject of old tuberculous disease of the ankle-joint. The treatment of rest in splints and the opening of abscess formations had been adopted without much benefit. A sinus now led down to the ankle-joint in front and two old scars existed over the site of each malleolus indicating a previous operation. The disease was apparently limited to the ankle joint, and the other joints of the tarsus moved freely and were apparently quite unaffected. Under these circumstances Mr. Collier thought that in resecting the ankle-joint the whole of the diseased tissues should be removed once and for all, and no particle of diseased synovial membrane or bone left to reinfect the other parts and continue the disease. The ordinary operation for excision of the ankle-joint by longitudinal incision over each malleolus affording an incomplete inspection of the parts, Mr. Collier adopted a more extensive and troublesome procedure of dividing the whole of the tissues, tendons, nerves, and vessels down to the capsule in front of the joint. By dividing the anterior middle portions of the lateral ligaments, a complete view could be obtained of the entire lining of the ankle-joint. The skin incision was carried by a curved sweep from the apex of one malleolus to the other, so as to extend a good inch below the line of the ankle-joint. At the point of division of the tendons and nerves a fine silk thread was passed through each to more easily identify the same and prevent retraction and afford a greater facility for reuniting the several parts at the completion of the operation. Extensive disease of the tibial aspect of the ankle-joint was discovered, as well as much thickening of the synovial membrane of the posterior lateral aspect of the joint. The whole of the diseased tissues in the lower epiphysis of the tibia were removed down to the epiphyseal cartilage, and the diseased synovial membrane obliterated, and the joint closed by deep and superficial sutures. Each cut tendon was readjusted as well as the anterior tibial nerve, and the foot carefully adjusted on a splint, with the foot piece at right angles. Mr. Collier contrasted the present method of conservative surgery with those of the past. Not many years ago this foot would have been condemned to amputation or excision with all its drawbacks, but now the practice of opening a joint and removing only the diseased tissues with a good expectation of preserving fair motion and use, applies to most joints of the body. The little manipulation of securing the tendons and nerve before division so as to prevent their retraction subsequent to identification and adjustment would considerably lessen the task of completing the operation. In this case one would expect union by first intention, good motion at the ankle-joint, and no loss of power or sensation.

Tuberculous Ganglion of Wrigt.—The same surgeon also had brought into the theatre a young man, æt. 20, the subject of a previous operation on the ankle-joint, now complaining of a large compound ganglion of right forearm of some eighteen months' standing, which had slowly been getting worse. The affection of the sheath was seriously impairing the use of the forearm, and some radical measure of relief was evidently called for. The disease was probably tuberculous, from the amount of thickening of the parts and its association with previous tuberculous disease of the ankle-joint. In this case, as in the last, a partial operation would be worse than useless, so Mr. Collier determined to expose the whole length of the sac by dividing the anterior annular ligament. This was done by a long incision from the root of the fingers to some four inches above the wrist-joint. The sac was found much thickened and contained the usual melon seed bodies. Each tendon was stripped of its covering and the whole sac removed by a careful but tedious dissection. The anterior annular ligament was readjusted and the wound closed. Mr. Collier said previous experience of this operation had not always been satisfactory; the result in some cases being a return of the trouble and in others a stiff and more or less useless hand. The method of opening the sheath, emptying its contents and applying irritants with a view to its obliteration, was seldom in Mr. Collier's experience attended with success. The more radical operation of complete excision was in the highest degree satisfactory. In a recent case the wound healed by first intention, there was no stiffness of the fingers and there remained considerable power of flexing the wrist and closing the hand.

In this case a similar result was to be expected.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, OCTOBER 29, 1902.

COSMOPOLITANISM IN MEDICINE.

In the address recently delivered by Dr. Osler before the Canadian Medical Association on "Chauvinism in Medicine," we are reminded of the fact that although science knows no frontiers, medical science still preserves traces of these archaic lines of demarcation. There is a chauvinism of schools as well as a chauvinism of nationality, and both are equally detrimental to the breadth of thought which is necessary to its highest development. The dissemination of knowledge by means of the medical journals has unquestionably done something to "disperse" this intellectual neoplasm, but unfortunately it is to be feared that much of the good work done by them falls on sterile soil. There is a limit to the energies of the individual practitioner, and in but too many instances by the time he has got through his day's work he has neither time nor inclination to maintain himself *au courant* of the progress of medicine in other countries than his own, even if he contrive to devote some spare moments to see how his own medical world wags. The best, if indeed not the only, means of cultivating breadth of views is to visit the various shrines of learning, a privilege which is at present confined to the comparatively few, partly for financial reasons and partly no doubt on account of the difficulties interposed by differences of language. American physicians, probably more than any other category of medical men, appreciate the advantages to be derived from this form of "Weltcultur." They are to be met with at every important European centre of medical teaching, and they evince the greatest desire to become conversant with the methods and ideas there current. It is possible that many, or at any rate some, of them return with an exaggerated notion of their acquisitions, but it cannot be denied that the influence of the teaching must be to facilitate a better grasp of their subjects. French and German physicians are so convinced of the respective and superlative excellence of their respective schools that but exceptionally do they think it worth while to stray outside the institutions of their native lands. Nor can it be truthfully said that English physicians avail themselves of the facilities offered by the geographical situation of their island to anything like the extent that they ought. Year by year, however, the proportion of Englishmen who complete their studies abroad is increasing, especially among those who aim at departments of practice superior to that of the drudgery of their calling. Medical students may be divided, roughly speaking, into two categories, viz., those whose intellectual horizon is limited by the acquisition of sufficient knowledge to enable them to obtain the right to practise and those who view a medical degree merely as a step in the direction of that higher standard of culture and skill which makes for success in the scientific practice of medicine. It is to the latter class that we look for the solution of the many obscure questions which are the opprobrium of the science of medicine, and it is by the concerted labours of observers all over the world that the veil of ignorance will little by little be drawn aside and that we shall let in the light upon morbid processes which have hitherto baffled investigation. Direct contact with workers in other countries than our own begets a sympathy and community of views which can never result from the mere glimpses of their work, which is all that medical journalism can give. The International Congresses, although in some respects they have disappointed the expectations of their organisers, have at any rate the merit of having brought together earnest labourers in the field of clinical and experimental research who would otherwise not have met. Such meetings tend to break down international jealousies, substituting a friendly rivalry in the investigation of natural phenomena, which is of the happiest augury for the future of science and of mankind.

RATE-PAID MIDDLE-CLASS ASYLUMS.

The treatment of lunacy constitutes a matter of prime importance to the community of every civilised state, not less from the curative than from the preventive points of view. There can be no question that great as the progress has been in the past as regards this special study, there still remains a wide field of conquest. The more exact education of the public and of the medical profession, for instance, in the recognition of the earliest signs and symptoms of mental change is a necessary precedent to a higher standard of successful treatment of insanity. Improved diagnosis, however, is only half the battle, and its lessons will be wasted unless ample provision be made for the accommodation of patients at all stages of their complaint. The attempt to meet this logical outcome of the scientific and humane tendencies of the age has led to the establishment of public asylums for all grades of pauper lunatics in every part of the United Kingdom. In these institutions the most modern medical and nursing skill has been combined with housing and general environment of an exceedingly high standard. In England and Wales there are no less than 110,700 notified lunatics, who have been classified by the Commissioners of Lunacy into eight groups, namely, (1) inmates of county and borough asylums; (2) of registered hospitals; (3) of licensed houses; (4) of naval and military hospitals; (5) of criminal lunatic asylums; (6) of workhouses and Metropolitan District asylums; and (7) private single patients; (8) outdoor paupers. The asylum accommodation, however, hitherto forthcoming to meet the demands of that classification has failed to provide for middle-class patients of small means. As a result, the friends of insane persons of that class have been compelled to turn to the shelter of the Poor-law lunatic asylums, where a small payment has, where possible, been made to cover the cost of maintenance. Such a system, clearly enough, is not calculated to bring about the cure of persons who have been reared amid the comfortable surroundings of middle-class position and suddenly plunged into the atmosphere of a pauper institution. So long ago as 1890 powers were conferred on local authorities to furnish accommodation out of the rates for the middle-class insane able to pay the cost of maintenance. It has been left for the West Riding of Yorkshire, so long the centre of enlightened lunacy reforms, to erect the first rate-built private asylum in the United Kingdom. The advantages of this institution it would be difficult to over-estimate. The ever-increasing pressure on pauper asylums will be relieved by the removal of a class of patients who will be placed under far better conditions as regards their chances of cure. The minimum charge for treatment at the new asylum will be 25s. a week, a sum which should leave a small margin of profit. The experiment is one that will be followed with interest by all who are concerned in the many important scientific and social aspects of lunacy. The example thereby furnished is certain to be followed shortly in other parts of the country; indeed, a movement of the kind is already on foot in a southern county of England. Meanwhile, we offer Yorkshire our sincere congratulations on its advanced position with regard to the most recent departure in the enlightened treatment of our insane population.

Mr. Frank B. Thornton, M.B., B.S., London, has been elected honorary physician to the Derbyshire Royal Infirmary.

Notes on Current Topics.

Social Honours in Medicine.

DOUBTLESS the status of the medical profession is steadily advancing throughout the world. In the United Kingdom it is still true that titular honours, especially in the higher grades, are reserved for the Army, the Navy, the Church, the Civil and Parliamentary Services, and for the wealthy upper ten generally. Literature has been honoured in a few instances during the past few generations in the persons of a few distinguished literary men who have been raised to the peerage. Medicine has thus far been recognised in that way by the admission of its single peer, Lord Lister, as a member of the Privy Council. If the conferring of titles be of any real value to the community at large it could hardly be exercised in a more distinguished manner than by ennobling the greatest figure that has hitherto stood out prominently in the history of medicine. It may be doubted, however, if the name of Lister will be rendered more revered or illustrious by the addition of a title. The world has always called Bacon by that early surname, and has refused to apply to him his title of Lord St. Albans. The late W. E. Gladstone chose to go down to posterity without any title of nobility. On the whole, medicine would probably preserve its traditions with infinitely greater grace and dignity by declining titular honours.

Popular Support of an Unqualified Practitioner.

A PUBLIC meeting, held under the auspices of the Peoples' Medical Defence Union, was held at Birkenhead a few days since to protest against the action of the coroner in deciding to hold inquests upon all cases in which an unregistered medical practitioner had been in attendance. Technically, of course, such deaths are uncertified, and, although it is not exactly law, we were certainly under the impression that coroners exercised a wise discretion when they made a practice of inquiring closely into the circumstances. If the report before us, from the *Liverpool Daily Courier*, is to be believed, the Home Secretary considers that by so doing the coroner would be exceeding his duty, a strange position for a Minister of the Crown to take, since it constitutes a direct recognition and encouragement of irregular medical practice. Moreover, the Registrar-General seems to have "climbed down," since he has decided to withdraw the special instructions which he had given in this connection. All this fuss has been caused by a certain Mr. Pleavin, who claims to hold an American diploma and has practised extensively on the strength thereof. The curious pass to which matters have come only emphasises the urgent necessity for a remodelling of the laws bearing on death registration. To employ a colloquial phrase, "We don't know where we are." This Mr. Pleavin infringes the Apothecaries Act every time he supplies a patient of his with medicine; he has, so far as we are aware, never been called upon to prove that he holds a reputable medical diploma, even of American origin, and as he is necessarily unregistered he possesses no status as a medical man. But what of this if he be privileged to act as though he were an ordinary registered practitioner? Truly our laws are chaos!

The Traffic in Putrid Meat.

THE occasional detection and punishment of a dealer in putrid meat really affords no adequate safeguard against this disgusting and dangerous traffic. Moreover, it is so profitable that the comparatively trifling fines which are imposed can in no sense act as deterrents. Last week an exceptionally revolting case was tried at the Clerkenwell Police Court, the prisoner having already been sentenced to a term of imprisonment for a similar offence, yet all the magistrate could, or did, do was to send him to prison for four months! Under the circumstances the penalty is miserably inadequate. A person may get that for picking pockets or some other comparatively venial offence—venial, that is, compared with the scattering of disease and death which is deliberately compassed by the vendor in rotten meat. The penal laws dealing with this class of offence urgently require revision. A man who sells chicory for coffee is as much a thief as one who deftly abstracts one's watch, and when his fraud also entails certain and grave injury to health a double penalty should be inflicted, one for the offence against property and the other for the offence against the person. Moreover, there is no valid reason why even first offenders should be let off with a fine. Their fraud is one of the most deliberate kind and is inspired by the most sordid motives. The law is inadequate, and magistrates for some reason are lamentably indulgent, with the result that such frauds, being difficult to detect, are rampant, and are likely to remain so.

The Service of St. Luke.

SEVERAL hundred practitioners, many of them arrayed in University gowns, were present at the annual medical service of St. Paul's Cathedral, arranged by the Guild of St. Luke. They occupied reserved seats under the dome, the transepts and the nave being filled by a vast congregation. The service was an impressive one, and there were seven hymns, in addition to the anthem, which were rendered with much taste and feeling. The choir of 250 voices consisted of members of the London Gregorian Choral Association, with Dr. Warwick Jordan at the organ. The anthem, "Hail, Gladdening Light," was conducted by the composer, Sir George Martin. The selection of the Bishop of Kensington as the preacher was fully justified. Taking as his text the words, "When I thought to know this, it was too painful for me, until I went into the sanctuary of God," he dwelt on the problems which confronted society in all ages, and which perplex men still. Incidentally he mentioned that in the portion of the diocese of London in which he labours, reaching from Oxford

Street to Hounslow in one direction, and from Uxbridge to Fulham in the other, there are no fewer than twenty hospitals and infirmaries. The Bishop made an appeal for a liberal offertory in support of the erection of a new college for the training of medical missionaries.

A New Sign of Paralysis of the Intestines.

At the recent meeting of the Canadian Medical Association, a new sign produced by paralysis of the bowel was described by Dr. G. Peters, of Toronto. Put shortly, it consists in increased transmission of respiratory and cardiac sounds along the intestines, as determined by auscultation of the abdomen. Dr. Peters terms his sign increased telephonic properties of the inflamed abdomen. His explanation of it, that whereas in the healthy bowel intestinal gas is retained in certain well-defined and circumscribed departments, each constituting a complete retainer in itself, in the paralysed bowel, by reason of its flaccid and atonic condition, the entire intestine is, acoustically considered, a continuous column of gas, which thus acts "on the precise principle of a stethoscope," the rigid abdominal walls acting as a sounding board. He further considers that the more well marked the sign the worse the prognosis, as the degree of paralysis is presumably greater. The increase in transmission of sound is a very natural condition to find in intestinal paralysis, but it is, perhaps, doubtful whether it is the result of the presence of a continuous column of air or gas so much as of the cessation of peristalsis. When the intestines are in their normal condition they do not constitute a favourable medium for the transmission of sound, in consequence of the presence of peristaltic movement, but once the latter has ceased the intestines become a more or less uniform and homogeneous mass through which sounds are readily transmitted.

Fallacies in Ordinary Tests for Glycosuria.

Most physicians who examine candidates for life assurance have from time to time met patients whose urine gave a positive result for sugar with Trommer's or Fehling's tests, but who nevertheless appeared to be, and, in fact, were, in excellent health. This being the case, it is always well to bear in mind that there are other substances besides sugar which may occur in urine, causing the copper reduction, or some colour-changes which are liable to be confused with it, and never to remain satisfied without the application of further tests. The most important of these "complicating" bodies are glyceronic acid and pyrocatechin (causing "alkaptonuria"), both of which give true copper reduction, while neither responds to the fermentation test. Pyrocatechin, it seems, is present even in healthy urine in small quantities, but is considerably increased by a proteid diet. Glycuronic compounds occur sometimes in healthy urine, but in particular after the use of various aromatic drugs, such as camphor and turpentine, and in some infectious fevers. Other substances which may under certain conditions cause colour-changes in the application of the copper test for sugar are uric acid and creatinin, though the probability of their doing so is small.

Clergyman's Sore Throat.

Sir Squire Bancroft has been preaching to the clergy from the text: "Happy are they that bear their detractions, and can put them to mending"—an excellent text which, however, does not come from the Scriptures, but from "Much Ado About Nothing." The eminent actor has been wise in giving clergymen some advice on the hygiene of the voice. Many preachers, he contended, spoke so entirely from the head or throat, instead of from the chest, that they fell victims to a complaint known as "clergyman's sore throat." Sir Squire has never heard of "actor's sore throat." The peroration to this remarkable, but in many ways admirable, sermon took the form of a paraphrase of Shakespeare: "Oh, there be preachers that I have heard preach—and heard others praise, and that highly—not to speak it profanely, who neither had the accent of Christian, pagan, nor man, they imitated humanity so admirably. O, reform it altogether." There is no doubt if preachers could be induced to use their voices aright they would save both themselves and their hearers much suffering—and would relieve medical men of prescribing "rest" to many a troublesome and irritable patient.

The Depopulation of Ireland.

The "Irish Question," which, like the poor, is ever with us, is peculiarly many-sided. The recently issued report on the census returns is full of material deserving of close consideration. The population of the whole country is given as 4,458,775. The Dublin district numbers 382,471. During the last decennium, as in each of the five preceding intercensal periods, there has been a decline. The number of lunatics returned in 1901 was nearly quadruple the number in 1851. In all the provinces the number of the Irish-speaking population has diminished. The number of Irish who left the country during the ten years ending March 31, 1901, with the intention of settling elsewhere, was 200,125 males and 230,868 females. We venture to think that even Mr. Wells, in his studies on "Mankind in the Making," must find in such returns "anticipations" which are anything but rosy.

The "Evils" of Fresh Air.

A lengthy and, in many ways, foolish discussion is finding opportunity for expression in the public Press on the supposed absurdities of the present agitation for pure air. Nurses are expressing opinions with respect to the suffering of patients in hospitals from too much air; chaplains are joining in with remarks on the production of pneumonia from too widely opened windows; irresponsible members of the public are plunging into the dispute with an ignorance of hygienic principles and practice that only too clearly indicates the inertia to be overcome if effective progress is to be maintained in regard to sanitary reform. We do not deny that discomfort may arise from "draughts," or that climatic conditions in this country often render convenient access to pure air difficult, but the remarkable evidence afforded by life at a modern sanatorium supplies the best reply to these grumblers regarding the danger of fresh air to the sick and the risk of night air to the delicate. The fact is our habits of life, especially in towns, have for so long been lacking in hygienic requirements that the sudden return to "natural" principles is causing difficulty and serious perplexity to many good folk unable to distinguish between "morbid" and "normal."

The Preservation of Infant Life.

Attention has recently been focussed on the appalling infant mortality occurring in many urban districts. Dr. T. Orme Dudfield, the Medical Officer of Health for Kensington, has just completed an important investigation into this matter as represented in the important centre with the health of which he is concerned. The average infant mortality in Kensington is 161 per 1,000, but in special areas it was as high as 447. As might be expected, a large proportion were deprived the advantages of natural nursing. The evidence of maternal ignorance abounded, but there do not appear to have been many clear signs of intentional neglect or actual unkindness. Dr. Dudfield pleads for the teaching of hygiene in our public schools, and advocates combined effort on the part of the sanitary authority and philanthropic agencies to secure the establishment of municipal *crèches*. He would also provide a municipal milk depôt for the supply of suitable food to the infants of the poor.

The Waste of Human Life.

The weekly return of deaths in London and in seventy-five other great towns, issued by the Registrar-General, furnishes food for much philosophical reflection. London, as a whole, shows the moderate mortality of 17·0 per 1,000 of population, which is estimated at 14,862,163 persons in the middle of the year. This ratio is slightly below that of England and Wales, namely, 17·4 per 1,000. An analysis of London districts reveals the usual striking difference in the mortality incidence, for instance, the ratio for Hornsey is 2·8; of Leyton, 8·6; of Tottenham, 9·2; and of West Ham, 15·5. The heavy death-rates, as usual, are met with in the poor and crowded districts, as St. George's-in-the-East, Whitechapel, and Southwark. Turning to the large towns, we find four with single figures, namely, Grimsby, which occupies the place of honour with a rate of 4·6, followed by Hastings with 6·3, Aston Manor with 8·6, and Reading with 9·2. The towns with the heaviest mortalities are those which have long earned an unenviable reputation as regards that test of wholesomeness in the past. The list is topped by Middlesbrough, with a death-rate of 25·1, and followed by Liverpool with 23·7, Tydvil 23·6, Preston 23·4, Salford 23·0, and Norwich and Smethwick each 22·0. These high averages point to an immense waste of human life, and the excessive returns from the foregoing towns form a standing reproach to the sanitary administration of the United Kingdom. The rate for Edinburgh is 15·8, of Glasgow 19·4, while that of Belfast is 22·4, and of Dublin 26·8, a comparison that may well set Irishmen thinking.

Week-end Recreations.

The busy times in which modern man is called upon to pass his existence leave their mark in the shape of a vast mass of nervous troubles and premature old age. The mischief of the thing lies chiefly in the continuity of the strain, on the principle of the bow which is ruined by being never unstrung. Indeed, with fairly regular intervals of rest and relaxation, it is almost incredible what an amount of exacting work can be got through by a man of affairs. The recognition of the necessity of change is shown by the popularity which has been accorded to the week-end holiday. Nowadays the coming of Saturday gives the signal for an exodus of politicians, journalists, business men, and jaded citizens of all degrees from town to country for a spell of fresh air if not always of sunshine. The braced-up energies of the man returning to the scene of his labours is a thing wonderful to see, and as a phenomenon has never been satisfactorily explained by medical science. Perhaps the class least able to benefit by the modern rage for week-end change is that of medical men, whose duties, as a rule, render absence from home difficult or impossible. There is more to be said in favour of this latter-day fashion than of most of the follies and crazes that fall under the mysterious laws whereby the actions of the multitude are guided, governed and controlled.

Venereal Disease and Sickness and Life Insurance.

It is generally held that an attack of syphilis radically depreciates the "life value" of the victim, and from a sickness point of view it may fairly be assumed that for some years after an attack the liability to disabling sickness is tangibly enhanced. The view is equally accepted that an attack of gonorrhœa entails no serious consequences once it has been recovered from, and it is not even customary to ask candidates for sickness or life insurance whether or not they have ever suffered therefrom. If, however, any practitioner asks himself which disease in his experience has most manifestly contributed to cause invalidity and premature death he will not improbably be disposed to state that the ultimate results of gonorrhœa are at least as disastrous as those of syphilis. For one case of locomotor ataxy or other nervous disease recognised to be dependent on syphilis there are probably many of enlarged prostate, vesical and renal disease directly due to the presence of an urethral stricture or to past irritation of the prostate. Then, too, there is such a thing as gonorrhœal rheumatism, which is far more frequent than is suspected in spite of the maxim that inflammation of a single large joint, apart from trauma, is generally of gonorrhœal origin. There is, of course, the fundamental difference that while in gonorrhœa any subsequent mischief is the direct consequence of a lesion ascertainable on examination, that associated with syphilis is more occult, and may give no indication of its existence until the symptoms of the impending disease present themselves. The question is one of considerable interest from the insurance examiners' point of view, and it can only be cleared up by the careful study of statistics which are of their nature very difficult to collect.

The Eyesight of London School Board Children.

The result of the systematic investigation of the eyesight of children attending the London Board Schools, carried on since February, 1902, by eight ophthalmic surgeons, goes to show that among the boys 8 per cent. and among the girls 11 per cent. suffer from more or less serious defects of the visual organs. It is noteworthy that the proportion of scholars with visual defects was much more marked in the poorer districts than in districts of a better class, and it is greatly influenced for the worse by the presence of children of foreign parentage. It is estimated that five years will be required to complete the examination of all the children, who number about 70,000. This result amply justifies the necessity for systematic examination of new scholars, since much of the labour bestowed on the defective children is thrown away in consequence of their physical inability to derive the benefit thereof.

How to Procure Sleep Without Narcotics.

In many instances of difficulty in getting to sleep and of positive sleeplessness, much may be done to afford relief without having recourse to insidious hypnotics. Going to bed too soon or too long after the last meal is a fertile source of sleeplessness and disturbed sleep. Those who partake of a substantial meal in the evening ought to allow an interval of from three to four hours before retiring to rest. An empty stomach is equally inimical to readily-induced, sound sleep, consequently those who retire late are more likely to enjoy a well-earned repose if they take a glass of milk, a biscuit, or other light food on going to bed. The latter class of sufferers may often be got to sleep merely by the administration of a carminative, of which the old-fashioned peppermint is the prototype. The practitioner ought, in justice to his patient, always to seek to restore the function by simple, non-injurious means, before prescribing hypnotics, which can at best afford but ephemeral relief, and the use of which is always attended by a tangible risk of the formation of a habit. The suggestion to give peppermint water with spirits of chloroform, or some similar combination, is one well worthy of a trial.

A New Preventive of Sea-sickness.

It is stated that fixing the eyes upon a mirror when the first symptoms of sea-nausea make themselves felt affords marked relief, the explanation being that the eyes and mirror form one body, so that the changing of horizons being reflected on a surface equal in every plane the eye loses consciousness of the different changes. We only hope it is true, but we are constrained to ask why simply closing the eyes should not have a similar effect? We know by sad experience that such is not the case, but that will not prevent our gazing into a mirror the next time we are attacked across the Channel as soon as symptoms of marine colic become obtrusive. A close analogy exists between sea-sickness and ordinary vertigo in that the immediate determining cause of the disturbance is, we are told, the "consciousness of the oscillation of the centre of orientation." On the other hand, there does not appear to be any necessary relationship between a proneness to vertigo when placed on a height and a special proclivity to sea-sickness. Moreover, the treatment would only be practicable on short trips and one cannot contemplate with equanimity a passage across the Atlantic spent either in the horizontal position with closed eyes or in the erect position with the eyes obstinately fixed on a mirror.

The Failing Eyesight Bogey.

When will ophthalmological experts cease to create needless alarm by asserting that our eyesight is failing merely because, as years go by, the proportion of persons wearing glasses steadily increases? It is surely obvious that this affords not the slightest indication of the quality of the national sight! We are familiar with the fact that unlettered people and children may present notable errors of refraction without being in any way inconvenienced thereby until the time arrives when they begin to use their eyes for close work, such as reading. Inability to focus objects within a given distance directs attention to a pre-existing defect, a condition of the eye, in fact, which only makes itself felt as a defect when an attempt is made to employ that organ for purposes for which it is unsuited. The prevalence of spectacles merely indicates the prevalence of occupations requiring for their proper fulfilment a degree of accommodation fully up to the average. Moreover, in the vast majority of instances vision is rendered perfectly normal by the use of glasses, so that the defect, such as it is, merely bears on one of the collateral and non-essential factors of actual vision.

Infanticide.

An interesting discussion has been going on for some time in Paris regarding the subject of infanticide in the animal world. Much evidence has been forthcoming to show that many animals undertake the destruction of those feeble or maimed or incapacitated from taking an active part in the struggle for existence. The two great governing instincts are those of self-preservation and procreation of healthy offspring. It would seem that when the offspring proves morbid or incapable of playing an effective part in life's struggle, the parental instincts were overborne and infanticide was practised. At this apparent cruelty in the animal world some would claim that we have evidence neither of caprice nor grudge but of an instinctive altruism. To students of mankind and those interested in the working of evolution, the subject is of much interest, and awakens many problems concerning the loss or lack of maternal instincts noticeable in not a few sensual women, and oftentimes leading to the neglect of infants or even actual infanticide.

The Mania of Depilation.

THERE is at present in the Salpêtrière Hospital at Paris a hysterical woman afflicted with a mania which prompts her to pick out her hair. For years she was subjected to vigorous treatment for supposed alopecia areata, and only close observation revealed the fact that the bald spots owed their presence to the patient's own perverseness. A curious point in the history of this patient is that from the age of seven she displayed an uncontrollable tendency to pick things to pieces. When this destructive inclination was checked by physical means she had attacks of dyspnœa and precordial distress, which she sought to relieve by pulling her fingers or ears, inflicting upon herself various painful lesions.

The Conference on Tuberculosis.

THE Conference on Tuberculosis which took place last week at Berlin attained the object in view, which is to bring together for purposes of discussion and mutual enlightenment physicians from various parts of the world who are specially engaged in the study of tuberculosis. The interest of the meeting, however, centred on the elaborate discussion of the views regarding the non-interchangeability of bovine and human tuberculosis, first promulgated by Professor Koch, in London, at the Congress of Hygiene. No fresh light seems to have been thrown on these vexed questions in the course of the discussion, although Dr. Heron is reported to have stated that in spite of the partial abandonment of the precautions hitherto taken against the consumption of meat, &c., of tuberculous cattle there had been no increase in the British death-rate from the disease. Dr. Koch's main argument appears to be based on the fact of the extreme rarity of primary tuberculous lesions of the alimentary tract and the absence of widespread epidemics due to the consumption of tuberculous milk and meat. He holds that the expenditure which would be entailed by the attempt to stamp out the disease among cattle, would be more profitably employed in improving the dwellings of the poor and in providing sanatoria. We shall, however, be in a better position to discuss the matter when the full reports are before us.

Clerical Longevity.

IT appears from a report recently issued by Mr. Archibald Hewat, F.I.A., in which is embodied fifty-five years' experience of the widows' and orphans' fund of Scottish Presbyterian ministers, that they and their wives greatly outlive the ordinary "healthy males" of the insurance tables. The prolongation of life on the part of the ministers reduces the claims on the widows' and orphans' funds by over 5 per cent.; but, on the other hand, when the widows do get a claim, they fare nearly 3 per cent. better than even female Government annuitants, which is saying a good deal. These figures go to prove what no one has ever disputed, that regular and temperate habits promote longevity.

The Medical Defence Union.

IT is announced that on and after January 1st, 1903, all new members will be required to pay an entrance fee of ten shillings, but the annual subscription will not be increased, remaining as heretofore, ten shillings.

THE annual general meeting of the Royal Academy of Medicine in Ireland will be held at the College of Physicians, Kildare Street, on Friday next, the 31st inst., at 4.30 p.m.

PERSONAL.

LIEUTENANT-COLONEL A. M. DAVIES, R.A.M.C., has been temporarily appointed a member of the Medical Advisory Board.

DR. J. WARD COUSINS has been appointed to represent the Royal College of Surgeons of England on the Central Midwives Board.

FIELD-MARSHAL EARL ROBERTS, K.G., will distribute the prizes at St. George's Hospital Medical School to-morrow (Thursday), the 30th inst.

MR. W. H. POWER has been admitted a Fellow of the Royal College of Surgeons of England under the regulation relating to members of twenty years' standing.

DR. J. KINGSTON FOWLER will deliver the opening lecture of the winter session at the Hospital for Consumption and Diseases of the Chest, Brompton, to-day (Wednesday) at 3 p.m.

DR. W. G. SMITH, physician to Sir P. Dun's Hospital, has been re-elected to the post of King's Professor of Materia Medica and Pharmacy in the School of Physic, Trinity College, Dublin.

MR. JOHN WEBSTER BRIDE, formerly of Epsom College, and now of the Owens College, Manchester, has been elected by the Royal College of Surgeons of England tenth Jenks Scholar.

AT the annual dinner of the York Medical Society, Dr. Edmund M. Smith, Medical Officer of Health for York, was presented with a handsome silver rose-bowl in recognition of his services to the Society as hon. secretary for six years.

WE regret to learn that Sir Lauder Brunton has been suffering from blood-poisoning, and it is with corresponding satisfaction that we are informed that he is slowly recovering therefrom, and will, it is hoped, be enabled to resume practice after a period of rest and change.

We regret to learn that Mr. Lennox Browne, F.R.C.S.E., is lying dangerously ill, and that recovery is almost hopeless.

Mr. David Caldwell McVail, M.B., has been nominated for a further period of five years from October 28th, 1902, a member of the General Medical Council, for Scotland.

Dr. James Little has been nominated for a further period of five years from November 26th, 1902, a member of the General Council of Medical Education and Registration of the United Kingdom, for Ireland.

At the Investiture held by his Majesty on Friday last the following members of the profession were presented and "invested":—

K.C.B.—

Surgeon-General J. A. Woolfryes, M.D., Hon. Physician to the King.
Surgeon-General A. C. C. de Renzy, I.M.S.
Surgeon-General W. Taylor, M.D., Hon. Physician to the King.
Sir W. S. Church, Bart., President of the Royal College of Physicians of London.

C.B.—

Surgeon-Lieut.-Colonel J. Magill, M.D.
Colonel J. D Edge, M.D., R.A.M.C.
Lieut.-Colonel Sir J. R. A. Clark, Bart., F.R.C.S., R.A.M.C. (Militia).
Lieut.-Colonel G. T. Beatson, M.D., R.A.M.C. (Volunteers).
B. A. Whitelegge, M.D.

C.M.G.:—

Surgeon-General E. Townsend, M.D.
Surgeon-General W. H. McNamara, M.D.
Major R. J. S. Simpson, M.B.
Major S. J. Frayer, M.D.
Major N. C. Ferguson, M.B.
Major W. H. W. Elliott, I.M.S

Knights Bachelors:—

W. Job Collins, M.D.
Alfred Cooper, F.R.C.S.
John Halliday-Croom, President of the Royal College of Surgeons, Ed.
Arthur Conan Doyle, M.D.
Thomas Richard Fraser, M.D., President of the Royal College of Physicians, Ed.
Victor A. H. Horsley, F.R.C.S.
H. Bell Longhurst, Hon. Surgeon-Dentist to the King.
William MacEwen, F.R.C.S.
Isambard Owen, M.D., Senior Deputy Chancellor of the University of Wales.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

SCOTLAND.

[FROM OUR OWN CORRESPONDENT.]

Notification of Pulmonary Tuberculosis.—A circular has been issued to the medical profession in Edinburgh by Sir Henry Littlejohn, acting under the instruction of the Health Committee, requesting their co-operation in obtaining, by a voluntary system of notification, precise information as to the amount of phthisis in the city. For each notification a fee of half-a-crown will be paid, and the information obtained will be regarded as strictly confidential. In no case will there be any official interference with patients either at home or in connection with their occupations, the steps taken being confined to sanitary inspection and disinfection where desired.

St. Andrew's University.—Mr. Andrew Carnegie, who was a year ago unanimously elected Lord Rector of St. Andrews, was formally installed in office on October 22nd. Advantage was taken of the occasion to confer the honorary degree of Doctor of Laws on the members of the Carnegie Trust, and on the United States Ambassadors to England, Germany, and Italy, and on Mr. Graham Bell, the inventor of the telephone. The Vice-Chancellor having opened the proceedings with prayer, Mr. A. G. Abbie, chairman of the Students' Representative Council, announced that Mr. Carnegie was unanimously elected Lord Rector last October, and asked the Vice-Chancellor to instal him in office. After being robed, the Lord Rector delivered his address, taking as his subject, "The Industrial Supremacy of the World."

Glasgow.—The result of the polling in the Rectorial Election was announced on Saturday afternoon, when it was found that Mr. George Wyndham had a majority of twenty-nine votes over Mr. John Morley. Mr. Wyndham had a majority in two nations—Glottiana (Glasgow and Lanarkshire) and Londoniana (Ayr and Renfrew), Mr. Morley in one—Transforthiana, while in Rothseiana (Bute and Western Highlands), the candidates tied with 112 votes each.

Glasgow District Asylum.—The annual report of this institution states that the population of the asylum is increasing rapidly, and that the increased accommodation in course of construction is urgently needed. The existing buildings provide for 850 beds; but on May 15th, 1902, there were 856 adults chargeable, an increase of thirty over the previous year. There were also twenty-five juvenile imbeciles in the detached villa erected for such cases, an increase of four. The discharges numbered 193, and the deaths seventy-six, or 8·8 per cent., as against 9·4 last year; while the recovery rate was 38·28 per cent., as against 29 per cent. in 1900-1. Keeping in view the present-day treatment of phthisical patients, the Board was about to erect at Woodilee and Gartloch asylums sanatoria for such cases. That at Woodilee will provide sixty-two beds. These erections are to be built of iron and wood, which, both as regards economy and speed in construction, are held to present advantages over brick and stone. They will be the first of their kind in Scotland connected with asylum administration. Plans have been approved of a home to accommodate 110 nurses, as well as of a pathological laboratory, which it is hoped will meet the growing necessities for scientific investigation.

Edinburgh University Rectorial Election.—The candidates were formally nominated on October 22nd, when it was intimated that the poll would take place on November 1st.

BELFAST.

[FROM OUR OWN CORRESPONDENT.]

Royal Victoria Hospital.—The winter session at the Royal Victoria Hospital was opened on Tuesday, October 20th, with an address by Dr. W. B. McQuitty, Assistant Physician, a full abstract of which will be found in another column. There was a large attendance of the medical staff and students. If no hitch occurs the next opening address will be delivered in the new hospital, which is now nearly ready for occupation. The number of students entered for the session cannot be told for a week or two yet, as there are always some late arrivals.

Mater Infirmorum Hospital.—I deeply regret to have to record the death of one of the most brilliant members of the staff of the Mater Infirmorum Hospital — Dr. Daniel McDonnell. Dr. McDonnell had been suffering from pulmonary disease for the last few years, and succumbed to it on

October 10th. He received his medical training at the Catholic University School of Medicine in Dublin, and, after a distinguished career in the Royal University of Ireland, he graduated in 1885. In addition to being physician to the Mater Infirmorum Hospital, he held the post of medical officer to the Royal Irish Constabulary of the north district of Belfast. Dr. MacDonnell's literary powers were considerable, and his criticisms and papers on philosophical and metaphysical subjects attracted attention. Great sympathy is felt by his professional brethren for his sisters, who have lost several of their nearest relatives in a short space of time.

THE TRAFFIC IN OLD HORSES.

WITH reference to our remarks on this subject in a recent issue, we have been making further inquiries, and find that there is a legalised and recognised business in horseflesh as a regular article of diet among the Continental poor, as much as 5½d. per lb. being paid for prime cuts, and that all the horseflesh so exported is consumed in this way in the country to which it is sent, and never returns to England in any form.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

THE PREVENTION OF QUACKERY.

To the Editor of "THE MEDICAL PRESS AND CIRCULAR."

SIR,—With reference to the excellent leader on the above subject in your last issue, I would point out that it seems out of the question to expect Parliament to legislate for protecting any interest of a profession not also necessary for the protection of the public. The medical profession must not, therefore, expect that any law will ever be proposed having as an object to prevent practice by unqualified quacks unless it can be shown that such practice is widely injurious to the public welfare. Surely to prove this must be quite easy. Evidence can be found in overwhelming quantity in every hospital throughout the country. Scores of patients can be produced weekly or daily illustrating both the cynical cruelty of the sham medical practitioner, and the harm – not less cruel and deliberate—inflicted by the concocter and vendor of fraudulent nostrums. That laws can be devised and enforced for the protection of the public against similar fraud is proved not only by the case of the legal profession which you instance but by the case of the veterinary surgeon. It is very much more difficult for unqualified quacks to practice upon animals than upon man, and falsely to assume any title implying qualification under the Veterinary Act leads at once to prosecution and conviction; whereas it is impossible to prevent medical quacks from adopting titles sufficient to lead the public to take them for legally qualified practitioners. No other profession in a similar position would rest as apathetic as ours. We are great in numbers, and in the honourable position of the bulk of our members. Why, then, do we not let our voices be heard? We have, in the British Medical Association an organisation through which our voice might be made audible; and whenever the present question is broached I ask myself why the Association does not take it up and see it through. It appears to me that the Association remains what it was described to be a few years ago, namely, a mere co-operative society for the publication of a cheap medical newspaper. For that reason I write now no longer as a member of the B.M.A., but rather as a reader and supporter of THE MEDICAL PRESS.

I am, Sir, yours truly,
AN OBSCURE PRACTITIONER.
October 23rd, 1902.

ARSENICATED TOBACCO.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I note in your issue of the 15th inst. that in the article on p. 414 entitled "Arsenicated Tobacco," the writer says, "We fear our worthy analysts have not been in the habit of testing tobacco for this deleterious agent," but I beg to state that some years ago my colleague, Dr. William Murrell, and myself, took much trouble in this matter, and published a communication on the subject in a medical contemporary, in which we drew special attention to the presence of arsenic in tobacco wrappers. We examined seventeen samples of tobacco and cigarettes, and in six of these arsenic was present in quantity in the wrappers, and notably in some well-known brands, the wrappers of which were green in colour, although it is only fair to say that not all green wrappers were thus contaminated. In the various tobaccos no arsenic was present, but that the use of such wrappers must not only be seriously harmful to the work people employed but conducive to poisonous contamination of the tobacco itself is an obvious deduction.

I feel, however, that the public is very apathetic where its palate is concerned, and will continue to smoke its favourite brands as heretofore, undeterred by the "scares" of analytical chemists or medical men; but your recent able article on the subject will doubtless have a beneficial effect in once more calling the attention of the medical profession to the possibility of arsenic in tobacco "forming an important factor in the production of various morbid conditions."

I am, Sir, yours truly,
H. WILSON HAKE, Ph.D.,
Lecturer on Chemistry and Toxicology at the Westminster Hospital Medical School.
Chem. Lab., Westminster Hosp. Med. Sch.,
Oct. 21st, 1902.

Literature.

MANUAL OF SURGICAL TREATMENT. (a)

PART V. of Messrs. Cheyne and Burghard's work on surgical treatment has now been some time in print. It deals with the surgical affections of the head, face, jaws, lips, larynx and trachea. The latter chapters deal with the intrinsic diseases of the nose, ear and larynx, and are under the authorship of Mr. H. Lambert Lack.

From a careful perusal of this volume we do not hesitate to say that it in no way falls below the standard of its predecessors. We consider those sections especially worthy of commendation which deal with intracranial suppuration, focal epilepsy, tumours of the brain, malignant disease of the upper jaw, cleft palate, operations upon the larynx and trachea. The advice given as to the course of treatment to be followed in this extensive field of surgery should go a long way to enhance the reputation of the work and its authors, as it bears the stamp of wide experience coupled with sound judgment. The surgical procedures recommended are thoroughly up to date, and the rules for the guidance of the practitioner are concise and explicit. In the latter sections of this volume, viz., those concerned with the intrinsic diseases of the nose, ear, and larynx, Mr. Lambert Lack has succeeded in performing his task in a highly creditable manner. We cannot but allude in the highest terms to his contribution on the treatment of the inflammatory affections of the accessory cavities of the nose; this part is exceedingly well done. The chapters dealing with suppurative inflammation of the middle ear, antrum, and mastoid cells are also excellent, and add much to the usefulness of this volume.

Part VI., Section I.—In the preface the authors state that it had been their intention originally to complete the series in six volumes, but in order not to condense the subject-matter too much, and to avoid a volume of bulky proportions, they decided to divide the last part into two volumes, and in this they have undoubtedly exercised a wise discretion. This volume deals with the treatment of the surgical affections of the tongue and floor of the mouth, the pharynx, neck, œsophagus, stomach, and intestines. One of the most important chapters is that which is devoted to the treatment of malignant disease of the tongue. It is headed "Cancer of the Tongue: Sarcoma and Epithelioma." We think this title is open to misapprehension, as it would lead one to the conclusion that the authors include both sarcoma and epithelioma under the heading "Cancer of the Tongue." We consider it preferable to reserve the term cancer for the *epithelial* form of growth, and that it should be clearly differentiated from the sarcomatous or *connective tissue* variety of malignant disease. The treatment of cancer of the tongue, however, is well handled, and will amply repay perusal. The section dealing with tuberculosis of the cervical glands is another which stands out prominently, and has received very careful attention on the part of the authors: the advice given as to treatment is thoroughly sound, and it is to be regretted that it is not more widely followed. The chapter on the surgical affections of the thyroid gland is good, especially that part devoted to thyroidectomy, Those devoted to ulceration and cancer of the stomach leave nothing to be desired; they are, indeed, to our mind perhaps the best in the volume. A praiseworthy feature to be noted here is the improved style of the illustrations. We are convinced that the poorness of the illustrations in the earlier volumes detract very considerably from the attractiveness of the work. At the same time we cannot refrain from expressing our contempt for a class of medical literature which has been foisted upon the profession of recent years, its principal characteristic being attractive-looking illustrations, flash binding, but—to put it mildly—a most disappointing letterpress. In the present instance, however, we have no such fault to find, but we think the authors would be well advised in maintaining the standard of the illustrations at the same pitch of excellence as the text. Of the remaining chapters of this volume those concerned with appendicitis and hernia are most deserving of note. We agree in the main with the methods of operation recommended, and consider that both subjects have been dealt with in a truly comprehensive manner. This volume is, perhaps, the most valuable of the series to the general surgeon, as it deals with a class of ailments which is constantly coming under his notice. We unhesitatingly recommend this work no less to the specialist than to the general practitioner, as being thoroughly trustworthy, well up to date, and the best of its kind in the English language. We congratulate the authors upon the result of their labours, and we look forward with pleasure to the concluding section of the work.

(a) "A Manual of Surgical Treatment." By W. Watson Cheyne, C.B., M.B., F.R.C.S., F.R.S., Professor of Surgery in King's College, London, and F. F. Burghard, M.D. and M.S.Lond., F.R.C.S., Teacher of Practical Surgery in King's College. Parts V. and VI. (Section I.). London: Longmans, Green and Co. 1902.

WILLIAMS ON THE RONTGEN RAYS. (*a*)

This book is written by a well-known American authority on the medical application of the Röntgen rays. It forms a valuable treatise on the subject, and embodies the results of a great amount of practical work. Dr. Williams is perhaps best known to English readers by his researches in the application of the Röntgen methods to physical diagnosis. The section of his book dealing with that particular part of his subject is carried out exhaustively, and forms the best description of the kind with which we are acquainted. The methods of examination are fully illustrated and described, together with diagrams, radiograms, and charts of pneumonia, hydrothorax, pneumothorax, tuberculosis, aneurysm, and various other morbid conditions of the heart and lungs. A feature of the book is the large number of illustrations, which are, for the most part, excellent. Some of the radiograms, indeed, are among the best we have seen, and represent the most advanced stage of Röntgen photography. Fig. 318 shows acute periostitis of the radius in a striking manner, and has many soft-tissue shadows. The section on apparatus is very full, and indicates a variety of appliances that will hardly find favour among operators on this side of the Atlantic, whose apparatus is usually of the simplest kind. Dr. Williams hardly gives the prominence to stereoscopic methods which we imagine it deserves, nor does he give quite enough credit to English observers. Thus, in the localisation of foreign bodies in the eye we see no mention of Mackenzie Davidson's special work, which is certainly of a brilliant kind. Davidson's localiser is alluded to elsewhere in the book. Nor do we find any reference to Dr. Walsh's book on the Röntgen rays in medical work, although it was the first systematic treatise written on the subject, and contains a wealth of reference matter which can hardly have escaped the author's attention. With these brief criticisms we leave this excellent book, and shall look forward with interest to future editions.

DORLAND'S MEDICAL DICTIONARY. (*a*)

The present age of encyclopædias and dictionaries has not been unfruitful in the fields of medicine. Dr. Dorland, of Pennsylvania, has made the latest addition to the list of dictionaries in the shape of an illustrated medical work dealing with the terms used in medicine, surgery, dentistry, pharmacy, chemistry and the kindred branches. The field is therefore a wide one, especially as the author has included tables of muscles, nerves and other anatomical systems, together with eponymic signs, tests and a great variety of miscellaneous information. So far as we have been able to test the matter, the information is accurate and useful. Turning to "Plasmodium," we find the malarial form described in some fourteen or fifteen lines, while on the opposite page is an excellent coloured plate of the various forms and stages of the malarial parasites. We find no mention, however, of the "high-frequency" current, which is being used so largely in cancerous and other affections, although it appears under the less well-known title of the D'Arsonval current. Nor, under "Treatment" do we find any mention of the Tallerman superheated air treatment, which in many arthritic affections is one of the most valuable methods introduced into modern medicine. The only mention of anything of the kind is under "Hot-air Bath," of which the temperature is stated to be 100° or 130°F. It is well known that the good effects of the Tallerman method are obtained at higher temperatures. Among other useful features of this book may be mentioned a table of elements and a long list of bacteria. Some of the coloured illustrations are exceedingly good, as, for instance, that of tubercle bacilli in sections of tissue and in sputum. The author, on the whole, has succeeded in producing a complete and handy dictionary, in moderate compass, which, although it cannot compete with Gould's incomparable medical dictionary, yet any medical man who purchases it will find it a valuable book of reference and will be able to refresh his memory on many points arising from practice.

TRAITE DE MEDECINE ET THERAPEUTIQUE. (*b*)

This, the penultimate volume of the series, deals exclusively with diseases of the nervous system—of the cerebrum, the pons, the meninges, and of the spinal cord and its membranes. The fact that the chapters are contributed by authorities of such world-wide fame as Bourneville, Raymond, Claude. Hutinel, Klippel, Dejerine, Thomas, Gilbert, and Lion is a sufficient guarantee that the text is worthy of the subject. The subject is a wide one, but is adequately handled in close upon a thousand closely-printed pages.

Disease of the nervous system is a branch of medicine in which very marked progress has been accomplished during the last two or three decades—progress which has been rendered possible by combined pathological investigation and clinical observation. It is

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(*a*) "The Röntgen Rays in Medicine and Surgery." By Francis H. Williams, M.D., Visiting Physician, Boston City Hospital, &c. London and New York: Macmillan Company. 1901. Price 24s.

(*a*) "Illustrated Medical Dictionary." By W. A. N. Dorland, A.M., M.D., Assistant Obstetrician, University of Pennsylvania, &c. W. B. Saunders and Co., Philadelphia and London.

(*b*) "Traité de Médecine et Thérapeutique." Publié sous la direction de MM. P. Brouardel et A. Gilbert. Vol. IX. Paris: J. B. Bailliere et Fils. 1902.

worthy of note that such progress is due in no small measure to the labours of British observers whose names figure large in the impartial and comprehensive *historiques* of the various morbid conditions.

Beginning with the study of general inflammatory states of the cerebrum, respecting which there is nothing much that is new to be said, we pass on to diseases of special parts of the central nervous system. It is in this department that the most substantial advances have been achieved, and the reasoning whereby symptoms are referred to strictly localised lesions is calculated to excite admiration. It is unfortunate that the deductions so ingeniously suggested are only possible to the comparatively few whose knowledge of the anatomy of the nervous system has been sedulously cultivated. In no department of medicine is accuracy of anatomical knowledge so essential to an approximately correct conclusion as in the recognition of specific lesions of this or that segment of the cerebro-spinal axis. In a general way the practitioner can fortify himself by looking up the subject and thus arrive at a reasoned diagnosis, but in diseases of the nervous system he is still at a loss, because the explanations are useless in the absence of a well-grounded familiarity with the anatomical arrangement of the parts under consideration, a long and arduous study in itself.

We cannot but praise the precision and the lucidity of the text. The style is really inimitable, and constitutes one of the attributes of the *génie francais*. Such a work as this defies analysis, and is beyond detailed criticism. There is an absence of that literary offhandedness which consists in offering to the reader a *pot pourri* of other people's hypotheses. Each contributor handles his subject from his own point of view, and one feels that he has mastered his subject and has thought out the problems for himself instead of leaving his reader to winnow the wheat from the chaff. If the therapeutical information lays behind the clinical and pathological the fault is inherent to the subject, and cannot be debited against the authors. It is a regrettable fact that diseases of the nervous system for the most part are refractory to therapeusis, with the exception of those in which there is reason to suspect a specific origin. Nevertheless the all-important subject of treatment is as fully dealt with as circumstances permit, and we are at any rate placed in possession of such remedial measures as are suggested by the indications.

The next and final volume is announced to appear very shortly, and its publication will complete a System of Medicine which it will be difficult to surpass for comprehensiveness and wealth of information.

WEST ON THE RESPIRATORY ORGANS. (*a*)

In the preface to this important work Dr. West says:—"If I had known beforehand the time and labour this book would have cost me, . . . I much doubt whether I should have had courage to undertake it." We rejoice that he did not know, and that his ignorance in this respect has permitted him to give us such a splendid addition to medical literature.

The plan of the book is excellent, "the relative importance of its parts being indicated by types of different kinds" with well-marked headings in heavy type, which make it clear and easy to find out sections which may be specially sought for. This clearness is carried into the text, which is written with crispness, simplicity, and an absence of padding, that make its study easy and pleasurable. Here is an example taken at random from the section on "Pulmonary Infarct":—"When the lungs are removed from the body the parts around retract, so that the infarct stands out somewhat prominently above the surface. The parts affected are dark purple or nearly black in colour, but they become red on section and exposure to the air. They are sharply defined from the surrounding lung, are firm, airless, and sink in water."

The above also serves as an example of the manner in which the morbid appearances are dealt with, the pathology of each subject being similarly clearly and fully discussed. "Clinical cases are all printed in small type," and are models of what such forms of illustration should be, the whole being in a nutshell, without any of the wearying details and useless minutiæ which usually accompany such, and cause us, as a rule, to pass them carefully over. Here they are inserted throughout the text to illustrate interesting or unusual features which are there referred to, and seldom occupy more than six lines of print.

The rest of the small type is well selected and of great interest, for it does not follow that because it is in small type it is of little importance, and a glance will show the practitioner that here he will find most that will specially interest him and tempt him to further reading.

Dr. West discusses the treatment of the various disorders and their symptoms exhaustively and with dignity; the book is not soiled with strings of new-fangled remedies of which we know little or nothing, exploited, for the most part, by enterprising chemists and druggists, and the employment of which is little short of quackery.

The book is well illustrated with charts and a large number of diagrams and pictures—the number is not stated, as they are not used for the purpose of padding, but are all highly useful and instructive. A large proportion of these are original, others are from well-recognised and trustworthy sources. There is nothing elaborate about them; they are plain, well done, and illustrate what they are intended to represent. The two volumes are of a handy size, well bound, with light good paper, clear printing, well proofed, and with an excellent index.

We congratulate the author on the production of these volumes.

EPILEPTIC COLONIES. (*a*)

This valuable report is the outcome of the far-seeing policy of the Committee of the proposed colony for epileptics which is shortly to be inaugurated at Warford, near Alderley Edge, in Cheshire, in sending Dr. Rhodes and Mr. Marshall to gather ideas in America. We are now accustomed to gather suggestions from our trans-Atlantic cousins, and certainly this volume clearly shows that in the formation of colonies and hospitals for the epileptic we have much to learn from the United States. In the short space of four weeks Dr. Rhodes and his companion visited nearly twenty hospitals and colonies, and this report is a remarkable record of concentrated energy worthy of Brother Jonathan himself. The plans and numerous illustrations, as well as the very clear accounts, give an admirable idea of American methods, and all interested in the establishment of institutions for the epileptic or mentally afflicted classes or concerned in their control and conduct would do well to study this excellent report.

THE HEALTH OF FINSBURY. (*b*)

The reports of medical officers of health should arouse more than a mere local interest. Not only are they valuable records of work done in certain districts, but they afford material for comparative study, and furnish suggestions which might be of more or less general applicability. Dr. Newman's report, the first annual record of the public health and sanitary condition of the Borough of Finsbury as constituted under the London Local Government Act, 1899, is in every way excellent. It is conveniently divided into sections dealing with vital statistics, records of disease, protection of food supply, house property and overcrowding, and general sanitary administration.

The pages devoted to a consideration of the recent outbreak of small-pox are a peculiarly interesting part of

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(*a*) "Diseases of the Organs of Respiration." By Samuel West, M.A., M.D., F.R.C.P., Assistant Physician and Lecturer on the Principles and Practice of Medicine at St. Bartholomew's Hospital, &c. In Two Volumes, with numerous Diagrams and Illustrations. London Charles Griffin and Co., Limited. 1902.

(*a*) "Report on a Visit of Inspection to Colonies and Hospitals for Epileptics, the Feeble-Minded, and the Insane, in the United States of America." By J. Milson Rhodes, M.D., and Edwin W. Marshall, C.A. Pp. 51, with Illustrations and Plans. London: P. S. King and Son. 1902

(*b*) "Report on the Public Health of Finsbury. 1901." By George Newman, M.D., F.R.S.E., D.P.H., Medical Officer of Health of the Metropolitan Borough of Finsbury. Pp. 180. With Tables and Charts. London: Thomas Bean and Son. 1902.

the volume. The control of phthisis receives much consideration. We are glad to see that voluntary notification is affording valuable results.

We hope Dr. Newman, in his next report, may be able to furnish a map of his district. Every report of this kind must be reckoned incomplete without a satisfactory delineation of the district under consideration.

Obituary.

ADOLPH RASCH, M.D.

The death occurred, on the 17th inst., at Halle an der Saale, of Dr. Adolph Rasch, who was well known in London, having practised here a number of years as a physician. For many years he was chief physician of the German Hospital in Dalston. He was also for four years president of the German Athenæum. A stroke of paralysis, from which he afterwards recovered, rendered it necessary for him to relinquish his practice as a physician. He then retired with his family to Germany, and spent the rest of his days at Halle an der Saale. As a physician he was a man of great eminence, and at the same time a great friend of the poor. Dr. Rasch leaves a widow and three daughters.

Medical News.

Boracic Acid in Shrimps.

A Southport fisherman was proceeded against at Wigan last week, for selling shrimps which contained forty grains to the pound of boracic acid. The evidence of the medical officer of health was to the effect that the presence of the acid *might* prove injurious to the health of the consumer, but the magistrates held that the prosecution had not made out their case, which they therefore dismissed.

A Medical Impostor.

A curious story of imposture by a man who pretended to be a qualified practitioner was unveiled at Carmarthenshire Quarter Sessions last week. The accused was a young man, described as a mason, who was charged with having obtained various sums of money by pretending that he was Dr. Davies, of Ammanford. Owing to a technical defect in the evidence the prisoner was discharged, but he was forthwith arrested by a Swansea police officer presumably in order that he may be charged with other offences.

Deaths Under Chloroform.

A girl, æt. 14, died under chloroform at St. Thomas's Hospital last week when about to undergo an operation on an injured eye. The usual verdict was returned. A similar fatality is reported from Leeds, where a woman, æt. 49, died after thirty-five minutes' chloroform anæesthesia. In neither case are any details forthcoming as to the method of inducing anæsthesia or the amount administered. A third death under chloroform took place at Guy's Hospital, the victim being a school teacher, æt. 44, who was suffering from cancer of the tongue. Death did not take place until twenty-five minutes after the cessation of the administration and five minutes after the completion of the operation, so that the chloroform may not have been the immediate cause of death. The anæsthetic was administered by the assistant house surgeon, who stated that only about 90 minims (!) of the drug had been given. A verdict of death from syncope was returned at the inquest. A fourth death occurred, in private practice, in Holloway, where a woman, æt. 34, succumbed to chloroform administered for the purpose of an abdominal operation.

An American Medical Mendicant.

A man called Clarence Perry, æt. 46, described as an American doctor, was charged at the Marylebone Police Court last week with obtaining money under false pretences from Dr. De Watteville. He had already been charged with similar offences, but as the evidence of false pretences was rather flimsy the magistrate discharged him with the advice that he had better not come before the Court again.

Hospital Officers' Association.

At the inaugural dinner of the newly-formed Hospital Officers' Association Mr. Lewis Glenton Kerr, of the Great Northern Central Hospital, presided, in the unavoidable absence of Mr. Adrian Hope, and a most enjoyable evening was spent. The chairman briefly explained the objects of the association, which are, among others, to promote social intercourse between the various branches of the hospital services; to disseminate practical information and progressive ideas concerning hospital work, and to arouse a keener interest in the advancement and prosperity of the medical charities of this country.

Dublin Death Rate.

The deaths registered in the Dublin registration area during the week ending Saturday, October 18th, 1902, represent an annual rate of 27·5 in every 1,000 of the population. Tuberculous disease caused 26 deaths; diseases of the circulatory system, 20 deaths; diseases of the respiratory system, 42 deaths; diseases of the nervous system, 17 deaths. One hundred infants died during the week, of whom 56 were under one year old. Within the city proper the death rates of the following districts were: South Earl Street 24 in every 1,000: Lisburn Street, 40·8 in every 1,000; and in Castle Street, 57·9 in every 1,000.

A Huxley Memorial.

The name of Professor Huxley will always occupy a prominent position among the pioneers who have struggled to secure a proper place for scientific study in our British methods of education. He stands out as one of the comparatively few medical men who have broken through professional limitations and taken a part in the formation of public opinion on many scientific points of vital importance. It is well, therefore, that we should be reminded of the debt we owe to Huxley. Professor Welch, at Charing Cross Medical School, in giving the recent Huxley lecture, has shown us how the influence of Huxley still lives on as an active force. It is pleasing now to note that Ealing has placed a memorial tablet in the public library as a birthplace memorial to the great scientist. The tablet bears the following inscription:—"The Right Hon. Thomas Henry Huxley. Born at Ealing, May 4th, 1825. Died at Eastbourne, June 25th, 1895. Try to learn something about everything, and everything about something."

The Cancer Research Fund.

A donation of £100 has been made by a lady, through Mr. A. W. Mayo Robson, F.R.C.S., to the Cancer Research Fund of the Royal College of Physicians of London and the Royal College of Surgeons of England, and of which the Prince of Wales is president.

Pass Lists.

Society of Apothecaries of London.

The following candidates passed in October:—

Surgery: R. Appleton (Sections I. and II.), F. M. Boclet (Section II.), J. B. Bradley (Sections I. and II.), K. A. Dawson (Sections I. and II.), I. Griffith (Section II.), P. S. Hopkins (Sections I. and II.), H. Johnson (Section II.), J. A. Jones (Sections I. and II.), C. E. H. Leggatt (Sections I. and II.), C. H. Osmond (Sections I. and II.).

Medicine: J. J. Anning, R. Appleton (Sections I. and II.), K. A. Dawson (Section II.), H. Johnson (Sections I. and II.), J. A. Jones (Sections I. and II.), J. P. Nettell (Sections I. and II.), F. W. B. Young (Sections I. and II.).

Forensic Medicine: J. J. Anning, H. Johnson, J. A. Jones, J. P. Nettell, F. W. B. Young.

Midwifery: R. Appleton, R. J O. Harley, J. A. Jones, W. Lovell, C. C. Rushton, J. H. K. Sykes, F. J. Turner, S. H. R. Welch.

The diploma of the Society was granted to the following candidates, entitling them to practice Medicine, Surgery, and Midwifery:—J. J. Anning, K. A. Dawson, P. S. Hopkins, J. A. Jones, H. Johnson, C. E. H. Leggatt, C. H. Osmond, and F. W. B. Young.

Notices to Correspondents, Short Letters, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

Original Articles or Letters intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

DANGER IN INKSTANDS.

A German bacteriologist is reported to have discovered a micro-organism which inhabits mouldy ink and is fatal to rats and guinea-pigs. The harm done by ink, however, is much greater when it is used in the ordinary way, microbe or no microbe, for a few words traced therewith have been known (*vide* Shakespeare) to "undo a man." In many instances, indeed, less discomfort would have followed its infection than resulted from its use as a writing material.

Paterfamilias.—Our correspondent is referred to the introductory article in our "Educational Number" of September 17th, wherein he will see the pros and cons fully discussed.

Status.—We are not in possession of recent English statistics but in the United States it appears that 1 of every 400 railway employés is killed each year, and 1 in 26 injured. Among passengers the average mortality from injury is only 1 in 2,150,000 1 in 121,748 being injured. Calculated in another way, viz., by mileage it is stated that one may travel 3,500,000 miles without being injured, and 61,500,000 miles without being killed, so that railway travelling is, in reality, safer than being in bed.

Credo.—An "expert" is one who possesses exceptional skill or knowledge derived from personal experience. Mere erudition or book knowledge does not confer the status. In practice an expert is often one who knows something of the subject as compared with others who know nothing.

M. R. S.—Your figures do not correspond to those in our possession. The official returns of small-pox in the United States from June 23rd to Oct. 3rd, 1902, show 7 375 cases, with 388 deaths, as contrasted with 10,112 cases, with 291 deaths, during the corresponding period of 1901.

TREATMENT MADE EASY.

"Medsin chests!" said the old retired skipper, with a snort of contempt. "No such tomfoolery aboard my ship when I went to sea! Ketch me a coddling of my crew. No, sir, if any of the 'ands was feeling queer I jest asks him 'W'ere's the pain? Is it above or below the belt?' If 'e sez it's above the belt I gives 'im a hemmetic: if 'e sez it's below the belt I gives him a dose of Hepsom sorlts. That's what I calls 'curing 'im! Turn my ship into a chemist's shop! Not me, sir!"

Mr. H. H.—It is not customary to give the names of writers of editorial articles.

Meetings of the Societies, &c.

Wednesday, October 29th.

British Balneological and Climatological Society (20, Hanover Square, W.).—8.30 p.m. General Meeting. 9 p.m. Ordinary Meeting. Dr. E. Symes Thompson: Far Away Climates. (Presidential Address.)

Thursday, October 30th.

Medical Graduates' College and Polyclinic (22, Chenies Street, W.C.).—5.30 p.m. Sir W. Broadbent on "The Pulse."

Tuesday, November 4th.

Medical Graduates' College and Polyclinic (22, Chenies Street W.C). —5.30 p.m. Mr. Hutchinson on "Inherited Syphilis."

Westminster Hospital (Broad Sanctuary, S.W.).—4.30 p.m Mr. Hartridge: Ophthalmological Cases. (Post-Graduate Clinical Demonstration.)

Thursday, November 6th.

Rontgen Society (20, Hanover Square, W.).—8.30 p.m. Opening Meeting.

Appointments.

Caie, William J., M.A., M.B., Ch.B.Aberd., Public Vaccinator for the Burgh of Bury St Edmunds.

Lindsey, Colin Dunrod, M.B.Lond., L.R.C.P.Lond., M.R.C.S., Medical Officer to the Plymouth Public Dispensary.

Littlewood, J. O., L.R.C.P.Lond., M.R.C.S., Certifying Surgeon under the Factory Act for the Mansfield District of the County of Nottingham.

Panting, Laurence C., M.A., M.D. B.Ch.Oxon., Honorary Medical Officer to the Royal Cornwall Infirmary, Truro.

Ratcliff-Gaylard, James, M.D.Brux., L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., Certifying Factory Surgeon for the Truro District of the County of Cornwall; Medical Officer of the Truro Workhouse and St. Clement's District; and Public Vaccinator of the St. Clement's and East Kenwyn Districts of the Truro Union.

Rigby, W.C., M.B., Ch.B.Vict., Certifying Surgeon under the Factory Act for the Adlington District of the County of Lancaster.

Soltau, Alfred Bertram, M.B.Lond., L.R.C.P.Lond., M.R.C.S., Medical Officer to the Plymouth Public Dispensary.

Traylen, C. L., M.R.C.S., L.R.C.P.Lond., House Surgeon to St. Mark's Hospital for Fistula.

Ward, James Philip Stephens, L.R.C.P.Lond., M.R.C.S., Medical Officer to the Plymouth Public Dispensary.

Vacancies.

Birkenhead and Wirral Children's Hospital, Birkenhead.—House Surgeon. Salary £100 per annum, with board, residence, and laundry. Applications to E. H. Tilby, Hon. Sec., 52, Grosvenor Road, Birkenhead.

Birmingham and Midland Eye Hospital.—Resident Surgical Officer. Salary £100 per annum. Applications to the Chairman of the Medical Board.

City of Liverpool Infectious Diseases Hospitals.—Assistant Resident Medical Officer. Salary £120 per annum, together with board, washing, and lodging at the Hospital. Applications to Edward R. Pickmere, Town Clerk's Office, Liverpool.

County Asylum, Rainhill, near Liverpool.—Assistant Medical Officer. Salary £150 per annum, with furnished apartments, board, attendance, and washing. Applications to the Medical Superintendent.

Down District Lunatic Asylum.—Junior Medical Officer (Male). Under thirty-two years of age, with double qualifications. Salary £100 per annum, with apartments, board, washing, attendance, &c. (valued at another £100). Applications to the Medical Superintendent. (See advt.)

Huddersfield Infirmary.—Matron. Salary £80 per annum, with board, lodging, and washing. Applications to Joseph Bate, Secretary, Infirmary, Huddersfield.

Jenner Institute of Preventive Medicine.—Assistant Bacteriologist for the Serum Department, Aldenham, Herts. Salary £200 per annum, with furnished rooms. Applications immediately to the Secretary, Jenner Institute, Chelsea Gardens, S.W.

Macclesfield General Infirmary.—Junior House Surgeon. Salary £70 per annum, with board and residence at the Institution. Applications to the Chairman of the House Committee.

North-Eastern Hospital for Children, Hackney Road, N.E.—House Surgeon. Salary at the rate of £80 per annum, with board, residence, and laundry allowance. Applications to the Secretary, City Office, 27, Clement's Lane, Lombard Street, E.C.

Wolverhampton and Staffordshire General Hospital.—House Physician immediately. Salary £100 per annum, with board and lodging. Applications to Edmund Foster, House Governor and Secrêtary.

Births.

Broughton.—On Oct. 18th, at Batley, the wife of Alfred G. S. Broughton, M.B., Ch.B., of a son.

Foulds.—On Oct. 20th, at Ashlea, Droitwich, Worcester, the wife of Francis H. Foulds, M.R.C.S.Eng., L.R.C.P.Lond., of a son.

Rowland.—On Oct. 22nd, at 16, Bore Street, Lichfield, the wife of Frank Mortimer Rowland, M.D.Cantab., of a son.

Marriages.

Bowle-Evans—Stevenson.—On Oct. 22nd, at St. Patrick's Church, Woolston, Hants, Captain Charles Harford Bowle-Evans, I.M.S., eldest surviving son of J. Bowle-Evans, Esq., J.P., D.L., to Nellie, younger daughter of Colonel W. F. Stevenson, C.B., R.A.M.C.

Blomfield—Olney.—On Oct. 22nd, at St. Mary's, Salehurst, Sussex, Samuel Bartlett Blomfield, B.A., L.S.A., of Hurst Green, third son of Josiah Blomfield, M.D., F.R.C.S., of Peckham, to Catherine (Kitty), only daughter of D. N. Olney, Esq., of Blenheim House, Robertsbridge.

Hassard—Chitty On Oct. 23rd, at St. Peter's Church, Eastbourne, Major Edward Moresby Hassard, R.A.M.C., youngest son of the late Major-Gen. F.C. Hassard, C.B., R.E., to Amy Robinson Chitty, third daughter of the late Alfred Murray Robinson, Esq., Shanghai.

Knox Simond.—On Oct. 22nd, at Holy Trinity Church, Paddington, W. John Edmund Knox, M.B.C.M., East Molesey, son of John Knox, M.D., Bakewell, to Suzanne Lilian, younger daughter of F. F. Simond, Esq., 64, Gloucester Gardens, Hyde Park W.

Lambert—Chattock.—On Oct. 14th, at St. George's Church, Hanover Square, Percy Lambert, M.R.C.S., L.R.C.P.Lond., to Beatrice Fanny, youngest daughter of Mr. Richard S. Chattock.

Pigg-Strangeways—Beck.—On Oct. 23rd, by special license, in the Chapel of Trinity Hall, Cambridge, T. S. Pigg-Strangeways, M.A., M.R.C.S., St. John's College, Cambridge, eldest son of John Thomas Pigg, of Surbiton, to Emily Dorothy, eldest daughter of the Master of Trinity Hall and Mrs. Beck.

Turner—Pritchard.—On Oct. 14th, at St. Peter's Church, Belsize Park, N.W., Bernard Roworth Turner, M.B., B.C.Cantab., of Oundle, Northamptonshire, to Emily Beatrice, second daughter of Urban Pritchard, M.D.Edin., F.R.C.S.Eng.

Deaths.

Alexander.—On Oct. 18th, at Dundonald, Ayrshire, William Alexander, M.D., J.P., aged 87 (retired).

Gale.—On Oct. 21st, in London, from double pneumonia, Frederick William Gale, M.R.C.S., L.R.C.P., of North Cheriton, Somerset, and lately of Kaikoura, New Zealand, aged 34.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

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Original Communications.

ABSTRACT OF PAPER ON THE CLINICAL HISTORY AND SYMPTOMS OF ONE HUNDRED AND TWENTY CASES OF EXOPHTHALMIC GOITRE. (a)

By GEORGE R. MURRAY, M.A., M.D.CAMB., F.R.C.P.,

Heath Professor of Comparative Pathology in Durham University; Physician to the Royal Infirmary, Newcastle.

OF the 120 cases, 110 were women and 10 were men, showing an exact proportion of 11 to 1. This emphasises the well-known fact that women are much more liable than men to suffer from Graves's disease. Of the 110 women, 57 were married, 1 was a widow, and 42 were single. Of the 10 men, 2 were married, 1 was a widower, and 3 were single.

The age at which the symptoms were first noticed was ascertained in ninety-seven cases. The onset in some cases was insidious, and so the age at which the disease actually commenced could only be fixed approximately. The youngest case was fifteen and the eldest sixty-five at the time the disease developed. These figures show that the greatest liability to the disease exists from fifteen to thirty-five years of age.

There was no history of exophthalmic goitre in either of the parents in any case, although in several cases the disease had occurred in collaterals. Foremost among the exciting causes were sudden or prolonged grief and anxiety or overwork. Of acute illnesses, influenza in three cases, and scarlet fever in one case, had shortly preceded the onset of the symptoms. In one case sudden arrest of menstruation for seven months after a wetting during a menstrual period, and in another hard work in front of a hot furnace causing profuse perspiration, were supposed to be the exciting causes. In only two of the cases did an accident contribute to the development of the disease. In one of them a bundle of wet clothes fell from a height of some twenty feet on to the patient's head, and the symptoms appeared a month afterwards. In the other case the patient fell off a plank into deep water, and was nearly drowned; six months afterwards the goitre appeared, eighteen months later palpitation, and seven years after the accident she had well-marked exophthalmic goitre; her sister, who was with her, went into the water after her; eight years later she also developed a goitre, followed by palpitation and tremors; as, however, her pulse was only 86 when I saw her she is not included in this series.

The onset was usually gradual, though in some cases it was more rapid. The first symptom most commonly noticed was the goitre. Thus, taking eighty-seven cases in which either one symptom or two symptoms simultaneously appeared before the others, an enlargement of the thyroid gland was the first sign of the disease in forty-three. This number, however, includes those cases in which a simple goitre preceded the other symptoms by a distinct interval, and which will be referred to again.

In nineteen palpitation was complained of before the other symptoms were noticed. In four only was the exophthalmos the first symptom, and in the same number either nervousness or tremors were first noticed. In one case rapid respiration was the first symptom which developed. Palpitation and nervousness or other nervous symptom developed at the same time in seven cases, exophthalmos and palpitation in four, goitre and palpitation in three, exophthalmos and goitre in one, diarrhœa and excessive perspiration in one.

SYMPTOMS.—The thyroid gland was enlarged in 112 cases at the time the patient was examined, so that the enlargement of the thyroid gland is a very frequent symptom, which was only absent in 2½ per cent. of my cases. In at least fourteen cases there had evidently been a simple goitre for some years before other symptoms were observed. It follows that in all cases of simple goitre in which surgical treatment is contemplated it is important to make sure that no symptoms of Graves's disease are present, such as tachycardia, tremors, &c., especially as all cases of Graves's disease bear operations badly, and they are therefore, if possible, to be avoided, except in cases where some local condition, such as compression of the trachea, is so marked as to render an operation for the relief of the dyspnœa imperative.

In twenty-seven cases the enlargement was slight, in thirty-six moderate, and in twenty considerable. In one, in which the goitre had been present for thirty-four years it was enormous, the circumference of the neck being twenty-three inches. In twenty-eight cases the size was not defined in the notes, and in eight there was no enlargement at the time of the examination, though in five of these there had been a previous enlargement which had subsequently disappeared.

The enlargement of the gland was generally uniform, the right lobe often being larger than the left, as it is in the normal gland. In only two cases was the left lobe larger than the right. In two cases the right lobe alone was enlarged and in one the right lobe and the isthmus. In four cases an adenoma or cystic adenoma of the isthmus was associated with general enlargement of both lobes. A thrill over the enlarged gland was felt in only fourteen cases, in thirty it was noted as being absent. In thirty-three cases a bruit was heard over the goitre. In twenty-three of these it was systolic in time. In seven there was a continuous venous murmur, which in three became much louder with each systole of the heart. In one other case a venous murmur was heard outside the lateral lobes at the base of the neck. In seventeen cases it was noted that no murmur was present, and in the remaining sixty-eight cases, this point was not noted.

(a) Read in full before the Royal Medical and Chirurgical Society, October 28th, 1902.

The frequency of the pulse was distinctly increased in all the cases varying from ninety up to 200. In no less than sixty-six, or more than half the cases, the pulse was between 120 and 150. In thirty-one of these, or more than one quarter of the cases, it was between 140 and 150 The high frequency of 200 was counted generally during a temporary attack of palpitation, and was not persistent. Great variation was sometimes observed in the same case within a short time. The pulse was usually regular, small, and compressible. Irregularity of rhythm was observed in only eight of the cases, and in one other the pulse was irregular in force, but not in time.

A systolic murmur, heard most distinctly in the second left intercostal space close to the edge of the sternum over the pulmonary area, was present in seventeen cases. In some of these cases this murmur was loud and very rough, almost purring in character. In sixteen cases a systolic murmur was heard at the apex, and in eight a systolic murmur was heard both at the apex and over the pulmonary area as well. As is usual in Graves's disease, pulsation was felt over a larger area than normal in the region of the apex-beat.

Although exophthalmic goitre is the usual name of the disease, exophthalmos is often absent, and this not infrequently has led to the disease being overlooked. In seventy-nine of my cases there was exophthalmos, in three there had been prominence of the eyeballs at an earlier stage, which had subsided before I saw them. In no less than thirty-two cases, or more than one quarter, there was no exophthalmos at all. Von Graefe's symptom, a delay in the natural fall of the upper eyelids when the eyes are directed downwards, was present in thirty-six out of ninety-one cases in which the presence or absence of this symptom was specially noted. Retraction of the upper eyelids, commonly known as Stellwag's sign, was observed in forty-seven cases; in twenty-nine it was absent, and in the remaining forty-four no mention of it was made in the notes. I find that in thirty-three cases the exophthalmos was present alone, in nine retraction of the upper lids with widening of the palpebral fissure as a consequence occurred alone, while Von Graefe's symptom was present alone in only one case. All three symptoms were present together in twenty-seven cases, in eight exophthalmos and Von Graefe's system occurred together without Stellwag's sign, and in eleven exophthalmos and Stellwag's sign without Von Graefe's symptom.

A fine regular tremor of the hands, which is best seen when the arms and hands are extended in front of the patient, is one of the most constant symptoms in exophthalmic goitre. This was present in 111 cases. In some of these it was very well marked, in others slight, and in some it was not observed on every occasion.

A peculiar mental condition of nervousness is a common symptom in exophthalmic goitre. Such patients are generally in a state of suppressed excitement. In seventy of my cases this condition was noticed as present, and in three cases it was absent, in the remaining forty-seven no special note was made as to the mental state. In some cases the patient's temper was irritable. Some were very emotional and easily perturbed by trifling events, such as would not upset their equanimity in health. In some cases restlessness was a marked feature, and many patients are remarkably insensitive to cold. Various abnormal mental states were also observed.

Weakness of the legs was complained of by fifteen patients. Five of them stated that the legs felt weak, as if they would give way while walking. Seven complained that the legs actually gave way, and five of these actually fell or were unable to walk at the time in consequence of this sudden loss of power. One patient who fell when she was out walking was unable to rise again without assistance.

The skin is frequently moist from an increase of insensible perspiration or from actual sweating. In seventy-six of my cases there was unusual dampness of the skin, and in fifty-five of them there was no sweating. More or less pigmentation of the skin was observed in twenty-two, or rather more than one sixth of the cases. The brown pigmentation was most marked on the exposed portions of the skin of the face, neck, and hands. In several cases it was especially marked on the eyelids and around or beneath the eyes. In one the outer edges of the areolæ and the front of the leg showed the pigmentation most markedly. In one case there was general diffuse pigmentation of face, neck, forearms, and hands, with darker freckle-like patches on the backs of the hands and forearms. In one case the patient used formerly to suffer greatly from chilblains, which disappeared when she developed exophthalmic goitre. As she improved, however, the chilblains began to return. Loss of hair was noted in ten cases. This generally occurred in the earlier or more acute stages of the disease. The hair generally grew again as the other symptoms subsided. In two of these cases the scalp became almost entirely bald, and in one this was accompanied by loss of eyebrows and eyelids as well.

Increased frequency of respiration was observed in some cases, but did not as a rule give rise to any discomfort.

Variations in the appetite were noticed in eleven cases; in four of these it was diminished, and in seven it was increased, or there was actual craving for food; in three others the appetite was good. Thirst was complained of in four cases. Vomiting occurred in seven cases; in two of these it was severe and continued, and largely contributed to the fatal issue. The most frequent symptom was diarrhœa. This usually occurred in the form of short attacks of painless diarrhœa of one or several days' duration. These attacks often started suddenly and terminated in the same manner. This liability to diarrhœa was noted in thirty-five cases, or rather more than one-fourth of the total number. Constipation was present in eight cases. In four cases there was increased frequency of defæcation. This symptom must be distinguished from diarrhœa, as it may be mistaken for it by the patient. The bowels act twice or thrice each day, but the motions are quite normal in character.

The condition of the urine was, unfortunately, only noted in nineteen cases. In four of these a trace of albumen was found, and sugar was found in three; in one of these there were 15 grains to the ounce of urine, and in another 40 grains.

In the 110 cases in women some irregularity in menstruation was noted in twenty-three cases. Amenorrhœa for periods of varying lengths, from five months to eight years, was present in ten cases. In two cases menstruation occurred too frequently, and the loss was also excessive.

Wasting is a common symptom, and some loss of flesh was noted in forty-five of my cases.

The course of exophthalmic goitre is generally slow and protracted, and runs so differently in different cases that it is difficult to follow, and prognosis is often uncertain. Even in the most favourable cases a patient after an attack of exophthalmic goitre seldom returns quite to the normal condition. In a considerable number there is a practical recovery, so that the patient feels well and complains of nothing, but a careful examination often shows that the pulse is still unduly frequent and excitable, or the thyroid gland remains slightly enlarged, or there is rather a staring expression or some general nervousness. Out of forty of my cases in which the patient was seen from time to time, or information obtained as to the course of the disease, seven died, two remained stationary, and thirty-one progressed favourably. Of these thirty-one in which improvement took place, nine practically recovered, though two of them afterwards had partial relapses, eight were greatly improved, and fourteen improved to a certain extent. In none of my cases was exophthalmic goitre followed by myxœdema.

Treatment.—If the symptoms are severe, absolute rest in bed for three or four weeks is essential with, in cases in which the nervous symptoms are predominant, a course of what is often known as "Weir-Mitchell treatment."

In less severe cases it is well to regulate the patient's mode of life as far as circumstances permit of it, providing for ample repose, alternating with gentle walking exercise, which may be gradually increased from half a mile up to three or four miles a day, according to the progress made. As cases of exophthalmic goitre do not feel the cold easily, and are not liable to catch cold, they can spend much time out of doors nearly all the year round.

Electricity is most useful in many cases. The faradic current may be employed easily and efficiently by a method which was first described to me by Sir Victor Horsley. Two flexible metal electrodes, about four inches long and two inches wide, covered with wash-leather, and connected by a small strap and buckle on each side, are moistened and accurately applied to the neck. One electrode is placed in front over the thyroid gland, and the other over the back of the neck; the straps are then tightened so as to keep them in position. The electrodes are connected with the secondary coil of a small dry-cell faradic battery, and sufficient current is turned on to produce a distinct prickling sensation. The faradic current should be applied in this way for an hour each night and morning for several months. Not only do patients feel relieved for a time by each application of the current in this manner, but I have seen steady improvement take place under this continued use. No special diet is usually necessary.

Medicinally, belladonna was frequently prescribed, but with doubtful results. To be of service in exophthalmic goitre any line of treatment must be steadily maintained for some weeks or even months, and patients often dislike to continue taking belladonna in sufficient doses to produce physiological effects. Convallaria has proved useful in cases in which the frequency of the pulse has been very high, and is more effectual in lowering the pulse rate than other cardiac tones. Bromides are useful in cases in which there are marked nervousness and tremors. Arsenic is useful in nearly all cases, and may be combined with other drugs with advantage. The best results are obtained by giving small doses of three or four minims of Fowler's solution three times a day for a month or two, or for the first three weeks of each month for five or six months.

Of the animal extracts thymus and supra-renal tablets have both been of service. Thyroid extract is harmful, as it often exaggerates the symptoms, and should not be given in exophthalmic goitre.

The Bathgate Prize of the Royal College of Surgeons, Edinburgh, has been awarded to Mr. John Macmillan Campbell.

WHOOPING-COUGH. (*a*)

By A. F. VOELCKER, M.D., F.R.C.P.,

Assistant Physician and Lecturer on Pathology at the Middlesex Hospital, &c.

The Goldsmiths' Company have, by their handsome liberality, enabled this hospital to open a ward of sixteen beds into which cases of whooping-cough are admitted for treatment. This ward has now been open twenty months, and it has been my good fortune to have had charge of the ward all the time. In bringing before you some of the results of my observations on the cases under my care I must claim your indulgence for a repetition of many facts well known to many of you; and if after all I am not in a position to answer the question which seems to rise spontaneously to the lips of so many people, "What is the cure for whooping-cough?" yet I hope to be able to point out to you some of the factors concerned in the successful treatment of the disease, some of the complications and their import, and some points which have proved of practical utility in the diagnosis of this disease. At the outset I should like to insist on an important point, and that is that the remarks I am about to make refer to the special cases under my care, and not to cases of whooping-cough as a whole. Owing to the infective nature of the disease, and to the great amount of attention which severe cases of whooping-cough require from the nursing staff, and from the fact that there are only two hospitals in London into which cases of whooping-cough are admitted as in-patients, the cases which come under our observation are naturally very severe ones, and in the greater number of instances are, at the time of their admission, suffering from some complication, most commonly broncho-pneumonia. That whooping-cough is infectious is well known, but from the fact that we only take in the severe cases it is rarely that we have as in-patients more than two children of one family at the same time. The infectivity of whooping-cough cannot be very great, because we find that although cases which have been in for some time and have then developed undoubted whooping-cough are sent to us from the general wards, yet we have not had more than one case ever sent from any one ward. If the disease had spread in the way in which we find measles or diphtheria spreading we should have had more cases sent in from one ward. Another point with regard to the infective nature of whooping-cough is that while the nurses do not nurse in any other ward, yet the sisters and nurses of this ward have their meals in common with the other sisters and nurses of the general hospital. In spite of this we have had no case of whooping-cough arising in the hospital which we could trace to infection conveyed by any one in the hospital itself. Those points show us that although whooping-cough is infective, yet with suitable hygienic precautions, that is to say, plenty of air space and good ventilation and ordinary cleanliness, it is possible to successfully isolate cases of whooping-cough.

The diagnosis of whooping-cough does not often come before us as a very practical difficulty. The cases that are most likely to be mistaken for whooping-cough are cases of either enlarged bronchial glands pressing on the trachea or main bronchi, cases of bronchiectasis, cases of pleural effusions, cases of enlarged tonsils and adenoids, and occasionally a case of laryngismus stridulus. I do not propose to go into the differential diagnosis of whooping-cough now, but there are certain points in connection with certain symptoms of whooping-cough which are perhaps worthy of your attention.

(*a*) Abstract of a Lecture delivered at the Hospital for Sick Children, Great Ormond Street, June 5th, 1902.

First of all there is the cough. If the cough is paroxysmal and unattended by abnormal physical signs in the chest and pharynx, the probability is that the case is one of whooping-cough. If a cough is brought out by psychical disturbance, or as a result of mechanical stimulation of the pharynx, and then that cough is paroxysmal, the case is probably one of whooping-cough. The practical point is, that when in doubt about a case of whooping-cough, never neglect an examination of the throat. The more you have to do with children the more you will look at their throats. When in doubt as to the nature of a cough, or if you have reason to suspect the presence of whooping-cough, examine the child's throat and use a spatula. Do not be in too great a hurry, and finish up with a little stimulation of the back of the pharynx with the spatula; this will very often bring out a characteristic paroxysmal cough, or even induce a whoop which had hitherto been latent or unnoticed. It is said that the cough of whooping-cough is more frequent at night. Our experience in the ward is that it is not. The cough of whooping-cough, as seen in private practice, undoubtedly does show itself most commonly towards evening, and the reason is that in all probability the child is tired, and, feeling ill, resents being undressed, cleaned up, and put to bed. It is probably partly the mental and partly the physical upset that make the cough more frequent. Another point that has come out with regard to the frequency of whoops and coughing is that while the number of individual whoops varies tremendously—in the marked cases we have 300 to 400 whoops in the twenty-four hours—yet even in these very severe cases the number of paroxysms of coughing rarely exceeds twenty in the twenty-four hours. In no single case have as many as thirty paroxysms of coughing been noted in the twelve hours. It must be remembered, of course, that the frequency of the cough is no measure of the severity of the attacks of coughing. Next to the coughing and the whooping is the question of expectoration. The most common conditions which cause children under twelve years of age to expectorate are whooping-cough and bronchiectasis. In bronchiectasis the expectoration is most abundant in the early morning, on the patient first getting up; and it is frequently, but by no means universally, offensive. In diagnosing bronchiectasis, besides the physical signs in the chest, a very important point is the question of clubbing of the fingers, and a large number of cases of bronchiectasis occur in children who are the subjects of syphilis. Spitting, in the case of a child who has a cough, is very suggestive of whooping-cough. The mucus is very thick and tenacious, and it clings about the mouth in a striking manner. Hæmoptysis, which is not a common phenomenon in children, is met with fairly frequently in whooping-cough, although in the cases under our observation in the hospital it has been by no means common. Hæmoptysis in pulmonary tuberculosis in children is, as you know, rare. We have had in the whooping-cough ward one fatal case of hæmoptysis in a child with whooping-cough, in whom there was pulmonary tuberculosis, the lungs having been extensively destroyed by the disease. Vomiting is a frequent symptom of whooping-cough, and is usually initiated by a cough. A combination of coughing and vomiting is very suggestive of whooping-cough, though by no means diagnostic of it. In bronchiectasis, in cases of enlarged tonsils, and in cases where we have enlarged bronchial glands, we may get co-existing coughing and vomiting. Vomiting occurred in over 90 per cent. of the cases of whooping-cough under our observation. Sublingual ulcer is a very suggestive sign of pertussis. The sublingual ulcer is an ulcer situated at the frænum, where the frænum joins the under surface of the tongue, and is usually single. It varies in size. It may be three-quarters of an inch long by half an inch broad. It may be only the size of a lentil, or even smaller. But although usually single they are sometimes multiple. The ulcer is the result of mechanical injury. It is said only to be present in children who have cut their lower incisor teeth. This is not absolutely correct. I have seen cases of sublingual ulcer in children who had no teeth at all. The explanation in these cases is simply that we have the under surface of the tongue and frænum markedly stretched over the alveolar margin; and although we have not a tooth there, we have sufficient stretching to cause laceration, and the constant movement prevents the healing. An interesting point about a sublingual ulcer is that it is very rarely painful; if we remember how painful aphthous stomatitis is in a child, it is curious to see a big ulcer under the child's tongue, and yet the child practically free from pain. Age is an important factor in connection with the occurrence of the ulcer. It is extremely rare in infants under one year of age. In thirty-five cases in my ward in which it was present, only one child under one year of age presented it. This was in a child who had cut its lower central incisor teeth. It occurred in twelve cases between one and two years of age; in seven between two and three; in five between three and four; in six between four and five, and after this its occurrence was rare, but the majority of children in the ward are under six years of age. It must not be concluded that in the bigger children we did not get them; the point is that we did not see so many big children in the ward. Is sublingual ulcer pathognomonic of pertussis? Personally, I should be inclined to attach very great importance to the presence of a sublingual ulcer, though I cannot say that it never occurs in any other condition. Subconjunctival hæmorrhage was not at all frequent. Out of 161 cases we have only had three cases in which subconjunctival hæmorrhages were noticed. The hæmorrhages are not pathognomonic of pertussis, although suggestive. With regard to the whoop, "One swallow does not make a summer," and one whoop will not make whooping-cough. We get cases of whooping-cough without any whoop, and we may get a whoop without any whooping-cough. In very young infants it is rare to get a whoop. But after six months of age whooping is not so infrequent, and we have had some very severe cases of whooping-cough in infants under one year of age. I have known enlarged tonsils, enlarged bronchial glands, bronchiectasis, pleural effusions—either purulent or serous—accompanied by an occasional whoop; and I have known the crow of laryngismus stridulus mistaken for the whoop of pertussis. The next point that has struck me is the influence of a rise of temperature on the frequency of the whoop. In a very large number of cases, when the temperature rises the frequency of the whoop falls, and when the temperature falls the whooping increases in frequency. Another point noticed has been this: Occasionally cases are admitted with a temperature of 102° or 103°, with signs in the chest which would justify the diagnosis of consolidation from pneumonia. After the child has been in the ward twenty-four to forty-eight hours the temperature falls and the number of whoops is lessened. These cases are interesting, because I believe they indicate collapse of the lung, and in my experience the diagnosis of collapse of lung from pneumonic consolidation is very difficult. I cannot state definitely any means by which I can tell the one from the other; but the fact that these cases suddenly get well without showing those signs of resolution which the pneumonic cases show, and the fact that the dulness clears up very quickly, indicate the nature of the case. Another point is the marked improvement which children show when they are taken into the hospital.

With regard to the complications of whooping-cough, I have pointed out that the majority of cases are admitted with some complication already present. By far the most frequent complication is broncho-pneumonia. Out of 161 cases admitted we had fifty-six in which either broncho-pneumonia or lobar pneumonia was, in our opinion, present. The gravity of this condition may be imagined from the fact that twenty-eight, or 50 per cent. of them, proved fatal. Bronchitis was a marked feature in eighteen cases, but of these only one terminated fatally. Pulmonary tuberculosis, usually associated with widespread tuberculosis, was present in fifteen cases of which fourteen proved fatal. Bronchiectasis was present in two, empyema was present in only three cases, and one of them proved fatal. Serous pleural effusion was present in three cases, and all of them recovered. Marked distension of the lung, which is often spoken of as acute emphysema, was present in two cases in sufficient degree to constitute a marked feature of the case, although it is present in a large number of cases as a temporary condition. So-called surgical or subcutaneous emphysema was present in two cases, both of which terminated fatally. Tetany was present in four cases, one of which proved fatal long after the condition of tetany had been recovered from, as a result of an attack of broncho-pnuemonia. Another little point which is not incidental to whooping-cough, but I think is an important practical point, is that ischio-rectal or gluteal abscess occurred in five cases, and from their occurrence we have learnt to look out for them as a cause of a rise of temperature which we could not explain in any other way. Under the head of convulsions I do not include those which were symptomatic of tuberculous or non-tuberculous meningitis or other actual organic disease of the brain. Convulsions were present in nine cases, and in six of these death occurred. Epistaxis was present in five, hæmoptysis in ten, three of which were fatal; otorrhœa in four cases, and we had one case in which aphasia, the result probably of thrombosis, occurred. In regard to treatment, the drugs which I have used have been antipyrin, belladonna, citrophen, bromoform, heroin, glycerine of carbolic acid, bromide of potash and belladonna, creosote, chloride of ammonium, carbolic spray and thyroid extract—and I need not apologise for using thyroid extract, because we had a child with malignant disease of the kidney, and we thought we could give it thyroid extract in the hope of influencing the new growth, but it had no effect in diminishing the whoop. Lately we have been going back to a very old practice, namely, the use of antimony. A Swedish doctor, who was over here recently, told me he knew of a specific which was much used abroad, and asked me to try it. Its composition is antimon. sulphurat. rub. gr. ⅙, extract. hyoscyami gr. ¼, pulv. glycyrrh. gr. ¾, pulv. gum. acac. gr. 2½, pulv. sacch. alb. ad gr. x. We tried it, and one case has done well on it, but further experience has not impressed me with its value. Besides those we have tried more or less generally carbonate of ammonium, strychnine, phenacetin, guaiacol, salol, and so on. I propose to summarise shortly what our experience has been. Antipyrin was tried in eleven cases. There was distinct improvement following its administration in two of them. In three there was slight improvement; and in six it was doubtful if the drug had any good effect. Belladonna was given in seven cases, and in three decided improvement took place. In two the patients seemed to improve; in two the effect was doubtful. Citrophen was used in ten cases, in five distinct improvement took place, in one there was slight improvement, and in four there was little or no benefit. Bromoform was used in eleven cases. Its use is not unattended with danger on account of its oily nature and high specific gravity. We have had one case of an out-patient admitted with symptoms of acute bromoform poisoning, and one case has occurred in the ward where the intoxication was mild; in both cases the symptoms followed shortly after the administration of the last dose in the bottle. Bromoform should be dispensed in a dark bottle kept in the dark, and the quantity of the mixture in the bottle should not be too great, so that the risk of an overdose of the drug in the later doses is diminished. Directions should be given that the bottle must be well shaken each time before pouring out the draught. The dose we have employed has been from 3 to 5 minims three to four times a day. In two cases there was distinct, in two cases slight, and in seven cases no definite improvement. Glycerine of carbolic acid was used in fifteen cases; in one case there was distinct, in three slight, and in eleven there was no appreciable benefit traceable to its use. Creasote was tried in seven cases; in two there was distinct, in one slight, and in four no definite improvement. The drug was given internally and as a vapour. Chloride of ammonium was tried in the hope that the drug might cause the secretion to be less viscid, and so easier of expulsion. Heroin was only tried in two of the cases I have analysed for you to-day, though I am giving it a more extended trial at present. In one of these cases when pushed to doses of one-thirtieth of a grain every six hours it was very beneficial. In the other case it was of no benefit. Carbolic acid spray was used in four cases with slight improvement in two, and none in the other two. Bromide of potash and tincture of belladonna were tried in six cases; one benefited distinctly, two slightly, and in three there was no improvement. From this *résumé* of the results of treatment by certain drugs I am afraid that I cannot claim to have discovered or even confirmed the existence of any drug which could be called a specific for the disease. During convalescence nothing has proved so useful as cod-liver oil and steel wine.

Clinical Readings and Practices.

II.—HYDROPS BRONCHIALIS. (*a*)

By the late

Sir B. W. RICHARDSON, M.D., F.R.C.P., F.R.S.

Definition of Hydrops Bronchialis.

In some of my experiments on the production of anæsthesia in the lower animals I observed that during the narcotism death was caused from a very simple circumstance. There was an accumulation of watery secretion in the bronchial passages of the animal, and from the obstruction to the entrance of air asphyxia resulted, which ended in death. I drew attention to this mode of death in one of my reports to the British Association for the Advancement of Science in the year 1871, and after this I began to observe that precisely the same is occasionally witnessed during disease in the human subject. I drew out a practical note upon this matter, which will be found in the *Asclepiad* for 1884, pages 253-55.

(*a*) We published some "Clinical Readings and Practices" in 1888, written specially for this Journal by the late Sir B. W. Richardson, the numbers containing which have been long since out of print. So much interest was taken in these papers that quotations from them by past and present writers has determined us to yield to the requests of several of our subscribers to reprint them. No. I. was republished in our last issue.

A term applied by people generally to the phenomenon in its later stages is extraordinarily terse and striking. The term is "*death rattle,*" a term which invariably denotes, to the common mind, the prelude to death. The prognosis is correct in the large majority of cases. I have very rarely known it wrong. Death rattle is the loud auscultatory sound indicating the conditions of disease now under consideration. Everyone who has the ordinary power of hearing can hear it. But the trained ear of the physician can often be led to detect the sound or rattle a long time before it is distinguished by those less gifted in diagnostic art.

The accumulation of water in the bronchial passages is aided by condensation, or, perhaps it were more correct to say, is aided by any obstacle to the evaporation of water from the lungs. Two such obstacles require to be specially noticed. The first is the accumulation of water vapour in the air of the room in which the sick person lies; the second is the reduction of animal heat in the body of the patient himself by which the radiation of water vapour by the natural warmth of the body is reduced.

The cases of disease in the human subject in which this condensation occurs are most commonly those of asthenic bronchitis; of the later stages of pneumonia; of narcotism during uræmic coma; of coma from apoplexy; and of coma from narcotic poisons such as chloral hydrate, nicotine, or morphia. In very cold and damp weather the condensation may be a cause of death during the narcosis produced by chloroform, methylene, or ether, and although I do not recollect any record of a case where it produced death in man, I have known it to produce the most alarming symptoms in the lower animals, during experiments with anæsthetics, and we then have seen it cause death. The general symptoms indicating Hydrops Bronchialis, the name I would apply to this condition, are those of obstruction to the breathing, loud and watery bronchial râles, and coldness of the body, beginning at the feet and extending upwards until the temperature of the whole body is reduced, and the coldness of death becomes universal.

It is always to be remembered that when once the condensation has commenced the progress to death goes on at compound speed. The minute bronchial tubes are soon filled and as the air finds itself shut off from the blood the respiratory changes are more and more impeded. The condensation is proportionately increased and the asphyxia is advanced. At last, as I originally expressed in describing this condition, the sufferer is literally drowned in his own secretion, the death being by pure asphyxia.

Symptomatic Importance in Disease.

As hydrops bronchialis is a symptom coming on late in the course of dangerous diseases or of toxic accidents, it is too often accepted as a mere prelude of death, and is allowed to run its course without attention. It is my object in this essay to rescue it, if I may so say, from this position. The accumulation of water in the bronchial passages may often be the turning point to death, the very turning point from life to death. It is, therefore, most important in all cases in which it may be expected, to be on the look out for it, and to take every precaution to prevent its making a commencement.

Treatment, with Illustrations.

There are two means, the one major, the other minor, by which the condensation may be held back in cases in which it is expected. The major measure consists in the management of the room in which the patient is lying. The air of the room must be kept warm and dry. It is quite impossible to over-estimate the necessity of obtaining dryness of the air. This fact is well shown by a side observation. In administering chloroform on a cold, damp day it is exceedingly difficult to produce quick anæsthesia. All the stages are prolonged, and very troublesome symptoms are developed. The dangers are increased: the throat and mouth of the patient are charged with fluid secretions; the narcotism is sustained with difficulty; and the recovery is greatly prolonged. In this instance the difficulty is easily read off on purely physical grounds; the presence of moisture in the atmosphere has interfered with the diffusion of the vapour of the chloroform on the one hand, and has interfered not less with the evaporation of water from the bronchial surface on the other. Thus the presence of water vapour in the sick room plays a leading part in disease, for good or for evil. In the forms of disease in which hydrops bronchialis is to be feared an excess of water may just turn the scale.

Let me now give one or two illustrations of a practical character. I was called hastily to see an aged man who was suffering from subacute bronchitis. The symptoms had not been very severe, but had been rather complicated with those of cardiac intermission. The breathing now had become embarrassed, and the bronchial tubes were filling with fluid. There was a soft watery râle over the whole of the chest. The air of the room in which the patient lay was saturated with water vapour. I tested the humidity by Lambrecht's hygrometer, and found complete saturation of the air. The room itself was small and not very well ventilated, it contained too many persons, and, worst of all, it was plied with vapour water from what is not inaptly called a "bronchitis kettle." The temperature of the patient had already become lowered to 98° Fahr., and here was he lying in a vapour bath in a room badly ventilated, and, still more seriously, with the temperature of that room at 55° Fahr. It would not easily be possible to invent for purposes of experiment an apartment or chamber in which the conditions were more favourable for the production of *hydrops bronchialis*. Every physical state favoured condensation everywhere. The looking-glass was dim with moisture; all metallic and other bright objects were bedewed with moisture. If anyone had taken out of that room a woollen or linen article and had spread it before the fire it would have been called damp, and the prudent housewife would have declaimed loudly enough against its use. But at this supreme moment the subject of damp was never, for an instant, taken into consideration. The bed of the patient was damp throughout, so that the evaporation from his cutaneous surface was almost as much obstructed as that from his lungs. This failure of cutaneous action added to the pre-existing evil, and combined with the feebleness of the circulation incident to the disease and the cooling of the body, rendered recovery next to impossible under the existing circumstances.

My first care in this case was to order away the "bronchitis kettle"; to have everything removed from the room that would hold damp; to insist that a good fire should be made up; and that there should be fewer persons in the chamber. In a very short time the temperature of the room was brought up to 65° Fahr., and the humidity of the air was brought down to 70°. I next recommended that the bed clothes of the patient should be changed, even to the bed itself. A fresh mattress and a light feather bed were well dried and warmed by the fire, and were made to replace those upon which the sick man had rested for many days. Blankets, sheets, and counterpane were in like manner removed and replaced by dry warm substitutes; whilst a German quilt which, from the moisture it had absorbed, had become weighty, was sent away with as little ceremony as the rest. The reform was extended to the handkerchiefs used by the sufferer; these were constantly changed, and the patient was directed to breathe through a handkerchief heated at the fire at frequently repeated intervals. In a period of an hour the condition of the air of the room was changed altogether; the air was rendered sweet, and, above all, its dampness was removed.

To anyone who understands the simplest principles of evaporation and of condensation, or who thinks over the way in which dew is produced, it will be at once clear that in the condition in which the patient alluded to was placed, the simple plans named above were directly calculated to give relief. I am sorry to say that they did not appeal strongly to the judgment of the friends of the sick man. They had sent for me to cure the sick man, and lo! I merely directed them to do what any nurse could have proposed and carried out. It was quite necessary that I should prescribe as well as direct, a suggestion I at once adopted; and this brings me to the second portion of the treatment of hydrops bronchialis to which I have referred, and which may be called the medicinal treatment.

In the choice of a medicinal remedy I proceeded precisely as if the patient were suffering from loss of blood or from a watery discharge from the bowels I prescribed a mixture containing in each dose ten minims of dilute sulphuric acid with five minims of tincture of nux vomica, in one fluid ounce of infusion of roses. At the same time I advised a fair amount of food. Minced meat—fowl or fish—bread sauce with essence of beef, and fruit - grapes—in small quantities. Thin fluids, of all kinds, were to be avoided altogether for a few hours.

The treatment thus proposed was carried out faithfully, and answered beyond my expectation. Within four hours the bronchial râles had ceased, the surface of the body had become warm, the breathing was free, and the immediate serious symptoms were entirely removed. From this attack the patient had a complete recovery. His friends attributed the success of the treatment to the medicine by which they meant the acid mixture, and considered the change in the room as a mere detail. Such is the effect of long-continued beliefs in nostrums on the human mind.

I do not dispute that the astringent mixture had a beneficial action. I should not have prescribed it unless that conviction had been strong in my mind. At the same time I am quite sure that the medicine played a secondary part, and that if the conditions of the patient's room had been allowed to remain the same all the medicines in the world, by whomsoever prescribed, would not have prevented the condensation of water vapour in the bronchial passages, nor the fatal asphyxia incident to unchecked hydrops bronchialis, an opinion which recalls to my mind a remark which I made many years ago, and which cost me a severe criticism at the moment, "Give me the management of the fire and the window and, in nine cases out of ten of acute disease, I will determine the fate of the patient."

In the case above named this truth stands out well. No medicine which I could have brought into that sick man's room could have stopped the deposition of dew or moisture on the face of the looking glass; and, in like manner, no medicine which I could have administered to the sick man himself would have prevented the deposition of water on his cooling bronchial surface.

When chloral hydrate had just come into use I was summoned to see the first case of poisoning by it. A retired Indian medical officer, who had become weary of life, determined to retire from life in the easiest possible manner. He had attended one of my lectures on chloral hydrate, and had seen how gently animals slept to death from a dose of it. Thereupon, in a melancholy mood, he obtained half an ounce of the hydrate, went to bed, put a quantity equal to 180 grains in half a tumbler of brandy and water, and composed himself to sleep. He was discovered in deep narcotism with the evidences of what he had done by his bedside. On being summoned I found the coma profound, but the surface of the body was warm and the circulation was firm and steady. There was but one danger, namely of hydrops bronchialis, and that was imminent. Moist watery râles, amounting almost to death rattle were to be heard all over the chest, and even in the mouth and fauces there was an accumulation of fluid which set up reflex action, and gave rise to cough. I had already learned from my experiments on the inferior animals with chloral that during the deep sleep produced by the narcotic, hydrops bronchialis was the condition which was most to be feared. I had also learned, from the same line of observations, that if the sleeping animals were only kept in a warm dry air, so as to secure a free evaporation from the lungs, they would always recover if the dose were not so large as to destroy life by an overwhelming shock. I therefore felt less alarm than those around me. Backed by experimental knowledge I felt convinced that if I could only prevent the patient from being drowned in his own bronchial secretion he would weather the storm. The best precautions were, therefore, taken to meet the physical difficulty. The temperature of the room was raised quickly to 75° Fahr., and the patient was brought as close to the fire as was possible. In this state he was kept for twelve hours, being fed at times through the nostrils, by a long stomach tube, with warm milk and water, to which beef tea was added. Gradually consciousness returned, and a very good recovery was made.

Now here, again, was a case in which the prevention of hydrops bronchialis absolutely saved the life. Long before I arrived at the bedside of the narcotised man the time had passed for resorting to any other measures, such as the use of the stomach pump or the administration of an emetic. The depth of the narcotism indicated that the soluble narcotic had diffused through the whole of the nervous system; and if any attempt had been made to produce vomiting it would not only have been useless, but would have been attended with actual danger from choking and suffocation. To prevent hydrops bronchialis was therefore the only chance of saving life, and how well it answered the history of the case itself records.

In a lecture on death by drowning and cold which formed one of my experimental courses I related an instance of drowning that in the most telling manner illustrates the simple yet practical lesson now before us. The captain of a vessel with some of his sailors was brought on board his ship insensible, from immersion in the sea. He and they were all looked upon as past hope. The captain was carried to the most convenient spot, where every effort, as it was said, was made, by artificial respiration and other means, to save his life. The means were of no avail; death took place in spite of them. But (and surely the irony of fate was never more fully vindicated) the sailors who had shared the same danger with the captain, and were equally insensible, were carried straight to the engine room, where they all "came to," and made rapid recoveries. The dry heat of the engine room produced quick evaporation of the water which had accumulated in the lungs, and life was restored without any further artificial aid.

One other class of case occurs to me before I close the record of illustrations. We hear in London, occasionally, of instances of what is called "fog poisoning." The one and only case I have seen that could be considered as of this kind was really one of hydrops bronchialis. The patient was a delicate man, a member of our own profession. I had often met him in consultation and in other matters, and he had many times complained to me of suffering during cold and damp from asthmatic breathing and cough. One evening I called upon him in order to visit a patient with him to whom he had summoned me professionally. The night was foggy, and he was rather anxious about the exposure to the fog; he nevertheless went out still later, when the fog was much denser, to visit another patient, and, returning home, was soon obliged to go to bed owing to the obstruction in his breathing. In a few hours he was involved in hydrops bronchialis, and died from the resultant asphyxia.

I pass now to one or two points of practice before I conclude.

Testing the Air for Moisture.

If the view I have stated above be correct it becomes of practical moment to test the air of the sick room in order to ascertain how far it is charged with the vapour of water. In 1870 I invented a clinical meteorological cabinet, which was made for me by Messrs. Horne and Thornthwaite, and which is very compact and convenient. It contains an aneroid barometer, a dry and wet bulb thermometer, and a chamber for holding ozone papers. The whole is very complete, and for the hospital ward is indispensable, if correct observations are to be carried on. But for daily practice the hygrometer of Lambrecht will be found quite sufficient, and as its hygrometric scale can be read off by the nurse, without calculation, as easily as the thermometer, it runs well, in practice, side by side with the thermometer. Lambrecht's instrument is an ingenious modification of De Saussure's. It has lately been introduced by Mr. Schomberg, of Berlin, and is made in this country by Messrs. Casella, of Holborn. The instrument is small and convenient. It is a cylinder two inches in diameter and three inches high, supported on a firm base, so that it may be placed safely on a shelf or table. The cylinder is perforated, that the air may traverse it freely. Within the cylinder a little bundle of hairs stretches from the top to the bottom of it, and on the top surface there is a dial plate, divided into 100 degs., and furnished with a needle, which, like the hand of a clock, points to the figures and indicates the degree of humidity. The humidity is determined by the hydration of the bundle or column of hairs. If the air be dry the point of the needle is deflected towards or to zero; if the air be moist the needle is deflected towards or to 100°. So delicate is the test that the simple experiment of breathing once or twice through the cylinder is quite sufficient to indicate a change of the needle on the dial.

Impressed with the importance of regulating the amount of water vapour in the sick room, I have, for two years past, used this hygrometer in practice, with, I am sure, good effect. It is a very simple instrument to use, and a nurse soon learns to watch it, and record its readings. A few simple rules may, nevertheless be supplied for the guidance of those who may not be familiar with the working of the instrument.

Rules.

1. The air absorbs moisture according to its temperature, and the warmer the air is the more moisture it can contain. For example, air at a temperature of 80° Fahr. can absorb as much as 10·9 grains of water vapour in each cubic foot, while at a temperature of 50° Fahr. it can only hold 4·1 grains, and at 32° only 2·1 grains. When the air has absorbed all the moisture it is capable of containing at its temperature, it is then said to be saturated.

2. Usually, the air is not saturated, but only contains a part of the moisture which at its existing temperature it could hold in suspension, and that part is, in ordinary practice, expressed in a percentage as the relative humidity or moisture of the air. For example, if the temperature of the air were 80° Fahr., and the relative humidity were 50° Fahr., such an air would be half saturated. It would contain 5·5 grains of vapour in one cubic foot; but if fully saturated it would contain 10·9 grains. In order to saturate the air with 5·5 grains of water vapour the temperature of the air would have to be brought down to a degree of 58·5° Fahr. It would then be completely saturated with moisture—dew point.

3. There is probably no form of disease that can, in any degree, be benefited by an air saturated with moisture at a low temperature. In some diseases, such, for instance, as those in which the vapour bath is thought to be useful, air saturated with water at a high temperature may be of service. That is a question yet to be answered. But we may be satisfied, for our present study, that whenever *hydrops bronchialis* is to be expected, a cold air saturated with vapour of water is always a true danger. The rule then is to raise the temperature and to reduce the moisture.

4. In carrying out this rule it is always safe to raise the temperature of the air to 64° Fahr., and to dry the air to 30° on the hygrometric scale. If the air at this point of dryness does not produce cough or sense of irritation in the throat of the patient, it may be raised in temperature even to 75° Fahr., and may be deprived of moisture still further, even down to zero, for a short time.

Modes of Drying the Air.

As a common practice the air of a room may be dried to the degree required by means of an ordinary fire, unless the outside air be heavily loaded with water vapour. If difficulty arise from this cause the process of drying the air may be expedited by placing in the room, in one or more places, an ordinary spittoon of earthenware, into which a few ounces of strong sulphuric acid have been poured. It is remarkable how quickly the air is dried by this simple plan, and, as the vessels holding the acid can be removed easily without spilling the acid, there is no occasion for carrying the method a minute beyond the point that is required. Practically, an air warmed to 64° Fahr., and dried to 30° on the hygrometric scale, is a good standard air for the prevention of hydrops bronchialis. In late stages, when the bronchial passages are surcharged with water, it may be necessary to raise the temperature to 70° or 80° Fahr., and at the same time to reduce the amount of water, but the standard given above is that on which to depend as the medium.

In cases in which it can be obtained for warming the sick room, the stove called the Calorigen—invented by Mr. Webb George—is exceedingly good. This stove, which can be heated either with coal or gas, brings the air through a tube into the sick room, allows it to pass through a heated coil, then to escape into the room. In a very short time the air can be brought to any desired warmth, and with this great advantage, that the warm air passing into the room may be dried and filtered on its way by interposing within the tube which feeds from the outer air or from the escape tube a screen of dry cotton wool, or any other surface that will absorb moisture. By this stove the air of the room can also be rapidly warmed to any desired point. I have often had one of these stoves introduced into the sick room, and I never had occasion to regret the practice.

Therapeutical Notes.

In one of the cases related above an astringent mixture was prescribed with good effect. This course is very sound in the class of cases named, and I know of nothing that need stand in its way. We must always remember that hydrops bronchialis is a condition so fatal that when it is present there is no hope until it is removed. As well try to save the life of a drowning man while he is under water as try to save a man drowning in his own secretions by any means that have not for their primary object the liberation of the lungs from the embarrassment in which they are placed. For additional aid to the external measures, the use of an astringent mixture of diluted sulphuric acid is as rational a plan as is the use of the same mixture for the treatment of hæmorrhage or diarrhœa. Neither is there any astringent in the whole list of remedies that acts more directly as an astringent on the bronchial mucous surface. To the acid mixture opium may be added if sleep is an urgent necessity, for there is no danger in giving gentle repose under an opiate which exerts, on its own part, good astringent properties. A ten minim dose of the diluted acid solution in a half ounce of water may be administered every hour, five minims of Battley's solution of opium being added according to requirements from time to time.

It is customary in cases of the kind under consideration to place hot bottles, or heated bricks, to the feet and limbs. The practice is a good one, and may be followed more freely than is usual. It is wise to place the heated bottles, wrapped in flannel, under the arms as well as by the limbs; it is also useful to extend the ends of the flannel from the heated bottles over the body of the patient, and to keep careful watch that the warmth is steadily sustained by frequent renewal of the warming appliances.

These are the best measures as yet known for the treatment of hydrops bronchialis; they are necessarily slow in their action, and I doubt not the day will come when science will show the way to a very much quicker method. In hospital the use of a hot air bath would be, without any demur, a remedy eminently ready and scientific, perhaps the very best remedy that could be devised. For these advancements, simple as they are, we must submit to wait, doing our best, meanwhile, to acquire the correct knowledge of principles, to act on that knowledge as well as we can, and to push on the development of details to their most advanced perfection.

A Fatal Epidemic of Measles.

The inhabitants of Kamtchatka have been visited by an epidemic of measles which, as is often the case in people normally free from the disease, proved extremely fatal. The number of victims is roughly estimated at ten thousand. When, however, we are told that a whole village of 800 inhabitants was completely wiped out by the disease we cannot help suspecting that the telegraph operator is imposing on our credulity.

Clinical Records.

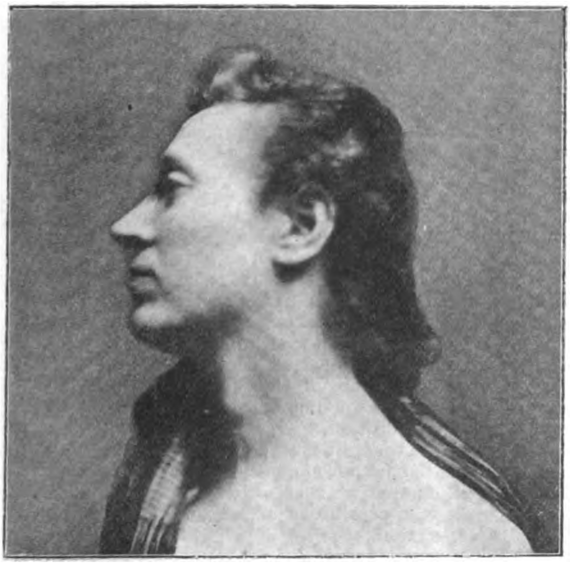
ROYAL FREE HOSPITAL.

A Case of Branchial Cyst.

Under the care of **James Berry**, F.R.C.S.,
Surgeon to the Hospital.

S. C., a married woman, æt. 41, the mother of six children, was suffering from a swelling on the left side of the neck. She stated that at birth there was a little hole about the size of a pin's head in the lower part of the left side of the neck, which never discharged or troubled her in any way until she was about sixteen years of age. She then noticed that a viscid yellow fluid, with an unpleasant taste, occasionally—*i.e.*, about once a week—came into her mouth. At about twenty years of age the escape of fluid into the mouth ceased, but the hole in the neck then began to discharge a viscid yellow fluid similar to the other.

A swelling then formed near the hole about the size of a nut, in which she felt a pricking pain. She said she could feel a cord passing from the hole upwards and inwards to the mouth, which, when squeezed from above downwards caused the secretion to escape from the hole in the neck.



The swelling was at first treated by poulticing under medical advice, but it was not until she was twenty-four years of age that it finally ruptured and disappeared.

It subsequently reappeared, and when it had attained the size of a walnut, she went to University College Hospital, where it was incised and the fluid evacuated. This was done on three occasions without effecting a permanent cure. When twenty-nine years of age the opening was dilated, but it closed two months later. When thirty-seven years of age the swelling recurred, and when about the size of a chestnut it was excised, the wound was drained and healed. The patient describes the lump after it had been removed as being like a bag containing yellowish fluid.

About six months ago she noticed a lump about the size of a pea higher up in the neck, which was gradually increasing in size. She complained of some difficulty in swallowing, but no fluid taken into the mouth had ever escaped through the external opening. She has two sisters with similar holes on the right side of the neck, associated in one with a discharge. A maternal grandmother also had a hole in the left side of her neck. Not one of the patient's six children presented any lesion of the kind.

On admission there was a swelling on the left side of the neck in the middle third about the size of a walnut, lying internally to the anterior border of the sterno-mastoid, the most prominent part being on a level with the thyro-cricoid membrane. The swelling reached to the upper border of the thyroid cartilage, a process passing deeply behind the great corner of the hyoid bone in the direction of the pharynx. A small lump about the size of a pea lay below the larger swelling, near a depressed scar.

The tumours were situated beneath the superficial fascia, they were elastic and fluctuating, obviously containing fluid. They had a well-defined outline and were not particularly tender. They were freely movable from side to side, but not from above downwards, and they moved on swallowing.

There was a scar about 1¼ inch in length, beginning about half an inch from the inner end of the left clavicle and passing upwards and outwards to the anterior border of the sterno-mastoid muscle. At the upper end of the scar there was a slight depression. The diagnosis was in favour of the swelling being of the nature of a branchial cyst.

On October 20th, 1902, the patient was anæsthetised, and the head was fixed in an extended position with the face turned toward to the right side. An incision was then made on the left side of the neck, beginning about half an inch from the left angle of the jaw and extending downwards and inwards for 5¼ inches, ending about half an inch from the left sterno-clavicular articulation and passing through the old scar.

The skin and platysma were divided, and all bleeding points clamped. The cysts were then exposed, being bound down by connective tissue to the infra-hyoid muscles. The connective tissue was dissected away over the upper part of the swelling, across which a branch of the external jugular vein passed. This was ligatured in two places and divided. The cysts were then lifted out of the wound and freed as far as possible. The upper part passed deeply between the external and internal carotids, and beneath the digastric tendon and superior laryngeal nerve, the common fascial vein passing underneath it.

A probe was passed into the lower end of the swelling and some brownish fluid escaped. When it was passed as far as it would go the point could be felt with the finger in the mouth just behind the tonsil. Gentle traction was exercised on the cyst in order to ligature it as high up as possible, but this caused it to rupture. On closer examination of the parts, the upper end was found to be closed, and proceeding from it was a thin white cord about an inch in length.

The wound was swabbed out with sterilised gauze steeped in a solution of 1 in 2,000 hyd. perchlor. A drainage tube was inserted into the upper end. The skin was then united by a continuous fishing gut suture, and a stitch was put into the tube to keep it in position.

The wound was dressed with sterilised gauze. Saline sponges were used throughout the operation, except at the beginning and end, when sponges steeped in sublimate solution were employed.

The specimen removed consisted of a sort of bag dilated at the lower end to about the size of a pigeon's egg; immediately above this was another dilatation the size of a hazel nut. The part of the specimen above the dilatation was about the dimensions of a lead pencil. Attached to it was a tag about the thickness of fine string an inch in length. On pricking the cysts a brownish fluid escaped, consisting apparently of altered blood and mucoid material.

The specimen measured five inches in length. On the day following the operation (October 21st), patient was fed per rectum every eight hours, the enemata consisting of beef-tea two ounces and milk two ounces. Nothing was given by the mouth.

The temperature was 98° and pulse 80 She had also saline injections of one pint every eight hours.

The drain was removed. Four days after the operation she had four tablespoonfuls of water by the mouth. She experienced no difficulty in swallowing. The stitches were taken out.

On October 26th, six days after the operation, she was puton solid diet.

The wound has completely healed up, but there remains a slight amount of swelling in the upper part of the scar.

Transactions of Societies.

LIVERPOOL MEDICAL INSTITUTION.

Meeting held Thursday, October 23rd, 1902.

The President, Rushton Parker, B.S., F.R.C.S, in the Chair.

CASE OF INTESTINAL OBSTRUCTION BY A GALL-STONE.

Mr. Newbolt read a case of intestinal obstruction caused by the impaction of a large gall-stone in the small intestine. Laparotomy and removal of the stone by incision of the gut was followed by recovery. The patient was a stout woman, æt. 54. The stone, when dry, weighed 308 grains, and was two inches in length.

Mr. F. T. Paul had seen a similar case. He drew attention to a less serious form of obstruction, due to paresis of the bowel, caused by local peritonitis, secondary to cholecystitis.

Dr. Bushby and the President commented upon the case, and Mr. Newbolt replied.

CASE OF MALARIA.

Dr. Macalister related the case of a young American sailor suffering from a first attack of malaria, which he had acquired on the West Coast of Africa. Treatment was rendered difficult owing to the inability of the patient to take quinine, which either caused vomiting or if absorbed led to a distressing train of symptoms. In from half to three hours after taking a dose he became covered with a scarlet rash, and accompanying this there were severe frontal headache and vomiting; pain in the eyes, which were congested and watery looking, and the eyelids swollen. There was also buzzing in the ears. These symptoms, which were associated with sensations of great prostration and weakness, generally passed off in about seven hours. The smallest dose of quinine or of any preparation containing the cinchona alkaloids, resulted in the same train of symptoms, and neither the time of their administration in relation to the malarious exacerbation nor their combination with other drugs, served to establish a tolerance.

CASE OF ATTEMPTED SUICIDE.

A second case related by Dr. Macalister was one of attempted suicide. The patient being an elderly man, who swallowed a teaspoonful of what he thought to be crude carbolic acid. It was a non-corrosive disinfectant, having an odour resembling creolin, and the symptoms which it produced were abdominal pain, congestion with some cyanosis of the face, drowsiness and mental hebetude. He had considerable difficulty in understanding what was said to him. Heart and lungs normal, pulse 90, regular but small. Respirations, 24. On the day following his admission it was noted that his complexion was dark and of an olive-green tinge. The breath had a creolin-like odour; his drowsiness continued in a lesser degree. No blood was evacuated either from the stomach or bowels. The urine was very dark in colour (like porter); it contained no albumin; sp. gr. 1029. The elimination of this foreign substance took place through the kidneys, and the urine, after remaining very dark for three days, gradually became lighter and lighter in colour, the specific gravity falling with the diminished colouration. It was always acid, never contained albumin, and never seemed to have any irritative action on the renal epithelium. The interest of the case depended on the fact that the man's blood was drenched with an antiseptic which took six days to become entirely eliminated, and the urine which he passed has remained undecomposed and perfectly free from micro-organisms, although it has been lightly covered in a wide-mouthed bottle for thirteen months. Dr. Macalister suggested that there are some diseases in which we would like to saturate the blood with an antiseptic in this way, and if he could be certain of the nature of the substance which this man took with the purpose of doing himself a grievous harm, he would feel very much inclined to administer it in considerable doses. Unfortunately the patient had carefully washed out the vessel which had contained the poison, which had been lying unlabelled in his possession for a long time, and it was impossible to obtain any certain evidence concerning its nature.

Dr. Burns Gemmel emphasised the value of the exhibition of opium in cases of quinine intolerance, and reminded members of the use of opium preparatory to the administration of ipecacuanha. Small doses of opium were useless, the patient must be well under its influence.

Drs. Lloyd Roberts, Murray Cairns, Craigmile, and H. Armstrong spoke and Dr. Macalister replied.

REPEATED CÆSAREAN SECTION.

Dr. Arthur Wallace read a note based on a case of the successful performance of conservative Cæsarean section twice on the same woman. The abdominal cicatrix was intact, and there was no trace of intra-peritoneal adhesion. The uterine scar was visible as a faint linear depression, and the uterine wall when incised in this site measured 15 mm. in thickness. In view of the recent publication of cases in which extensive utero-parietal adhesion had allowed repeated sections to be performed extraperitoneally, Dr. Wallace considered that some attempt should be made to bring about utero-parietal adhesion sufficient to obtain this advantage. Therefore, after closing the uterine wound, an extensive ventrofixation was carried out, an area of the uterus measuring three inches by one inch, corresponding to the extent of the wound, was sutured to the lower part of the parietal opening. For two months afterwards the uterus remained in its elevated position, and then gradually descended to the usual level of the pelvis.

Dr. Burton had acted upon Dr. Wallace's suggested plan in a recent Cæsarean section that he had performed. He hoped, therefore, in the next operation, when required, that he would be able to carry it out without opening up the general peritoneum.

Dr. Grimsdale pointed out that although the incision in the uterus at the time of the section was about five inches, the scar was only about one inch long when involution of the uterus was complete. In a second pregnancy the muscular tissue would grow but not the scar, and therefore if the whole length of the scar was adherent, he did not think it would in any way help a future operation.

Dr. E. T. Davies thought it was improbable that any adhesions would persist permanently in an aseptic operation. The real chance for success in Cæsarean section depended upon the possibility of securing a suitable time for the operation.

Dr. J. E. Gemmell felt that in favourable cases, *i.e.*, those with known pelvic deformity, and time of operation chosen, the results were almost as satisfactory as uncomplicated ovariotomy. Unless a well-marked inflammatory process produced the adhesions, he did not think they would be of much service in a second section.

Dr. Briggs also spoke, and Dr. Wallace replied.

Mr. Thelwall Thomas read a paper on

AN OPERATION FOR UMBILICAL HERNIA.

He utilised the transverse incision, and always excised the greater part of the skin covering the hernia. The neck of the sac was now freed, and the sac explored through an incision near the exit from the abdomen. Omentum was at once tied off, and the stump returned into the belly, a free cutting up of the hernia was now easy and bloodless. The gut was now dealt with, and the sac containing the adherent omentum cut off. The stump of the sac was clamped in a transverse direction and closed by continuous silk suture, leaving at each end a length of silk. A place was prepared for it in the extra-peritoneal tissue above the aperture in the linea alba, into which it was drawn by threading the silk ends through the abdominal aponeurosis, and suturing them finally into the aponeurosis. The aperture in the linea alba was drawn taut in a transverse direction by strong tractors, the margins notched freely with scissors, and held together by mattress sutures, so that the suture line was transverse. The skin wound was closed transversely, and a small glass drainage tube passed through an independent puncture. He had performed the operation in nineteen cases, some of large size, with recurrence as yet in one only, and in this the silk had been infected during operation, and suppuration set in.

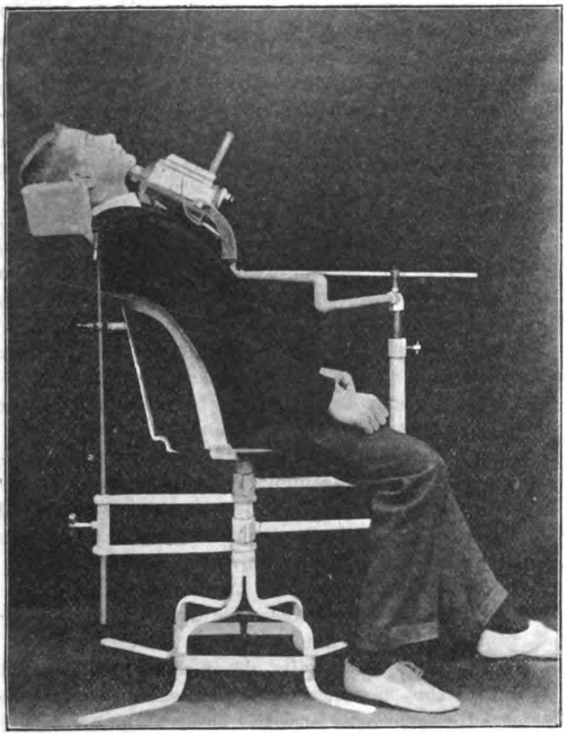
The **President** considered umbilical hernia the most difficult of all hernia on which to perform a radical cure. He thought the transverse incision much the best operation in general.

Mr. **F. T. Paul** had adopted the operation recommended by Mr. Thomas, and thought highly of it.

Drs. E. T. Davies and Briggs and Mr. R. W. Murray spoke, and Mr. **Thomas** replied.

NEW FINSEN LAMP.

Dr. **Stopford Taylor** showed a new lamp designed to meet the demand for a very small lamp, automatic in its action, burning iron or carbon electrodes and working direct from the electric supply main.



This photo shows the lamp applied under the chin. This is one of the most difficult positions to reach, but the illustration shows that it can be easily treated with this lamp.

These conditions are fulfilled by making the shell of the lamp a water-jacket of very small proportions, mounted on a frame which permits motion in all directions, and at the same time is rigid when in working position. It is imperative that the diseased area to which the lamp is applied be rendered anæmic, so that the rays can penetrate the tissues mere application of the lamp being futile unless sufficient pressure be exercised to produce this effect. For this purpose he obtained the chair from Berlin, and had the lamp attached to it by means of a powerful bracket, steady pressure of the lens against the patient being maintained by a rack and pinion adjustment and counter pressure by the headrest. Fifteen to twenty minutes is sufficient to produce a good reaction. It is noiseless, and on the score of economy it is a distinct advance on all modifications of Finsen's apparatus. The current is two amperes at a pressure of forty volts across the arc. The rubber water tube connections have been removed so as not to obscure the lamp. Dr. Taylor said he was indebted to Messrs. John Hunter and Co., of Liverpool, for their skill in carrying out his suggestions.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

Meeting held at Liverpool, October 17th, 1902.

Dr. S. Buckley, President, in the Chair.

Dr. **Archibald Donald** (Manchester) related a case of *Kraurosis vulvæ*. The patient was a single woman, æt. 62, who had ceased to menstruate seventeen years before. The symptoms which had existed two years had been at first severe pruritus vulvæ followed by pain at the vaginal orifice. Micturition was increased in frequency and there had been slight loss of flesh for three or four months. The patient stated that she had had "diabetes," but careful examination of the urine failed to detect any sugar. Examination of the vulva revealed a raised hard flattened swelling, slightly ulcerated on the surface, situated on the inner surface of the right labium and extending slightly into the vagina. There was extreme atrophy of the skin and mucous membrane. The external genitals had so shrunk that the vagina would not admit the little finger. The skin was pearly white, and tore readily. The uterus and vagina were found to be double, the septum extending to the hymen, which was intact. The whole of both labia, including the nodule, were excised. Dr. Donald remarked on the rarity of the disease and its diagnosis from senile atrophy and pruritus vulvæ. It also seemed to have some relation to malignant disease. Microscopical sections were shown.

Dr. J. E. Gemmell, Dr. H. Briggs, and others remarked on the evidence of epithelial proliferation in some of the sections which would suggest the possibility of malignant new growth rather than an atrophic disease.

Mr. **Damer Harrison** remarked that epithelial proliferation was not uncommonly present in the neighbourhood of atrophic diseases elsewhere; for instance, in perforative ulcer of the foot.

Sudden Death after Confinement.—Dr. **Nathan Raw** (Liverpool) narrated the case of a woman who died suddenly two days after confinement. The labour was natural and the patient was apparently quite well, when, without the slightest warning, and whilst her husband was talking to her, she suddenly expired. Postmortem the pericardium was found distended with blood clot, resulting from the rupture of a large aneurysm of the aorta into the pericardial sac. The disease had not been suspected during life. The specimen was exhibited.

Dr. **Murray Cairns** (Liverpool) showed a fœtus with extreme hydrocephalus associated with spina bifida. Delivery had been effected after perforation of the after coming head. He suggested that possibly under such circumstances a free incision into the spinal sac would have allowed a more gradual escape of the fluid and a less sudden diminution of pressure in an over-distended uterus.

Ruptured Tubal Gestation.—Dr. **Arnold W. W. Lea** (Manchester) showed a ruptured pregnant Fallopian tube and ovary removed during the stage of active bleeding. The patient consulted Dr. Lea on account of her having missed two periods and having had slight continuous bleeding for two weeks, followed by a sharp hæmorrhage and passage of a "piece of flesh" one week before seen. Recurrent attacks of pain had also been present. On examination a rounded swelling was found on the left side of the uterus, and the latter was displaced to the right. The swelling was mobile. Tubal gestation was diagnosed and arrangements made for admission to a nursing home next day. The same evening, however, severe pain and symptoms of internal hæmorrhage developed. Morphia was given and the symptoms being relieved operation was not performed until next morning, when the abdomen was opened. There was much fluid blood in the peritoneum, and actual bleeding was found to be taking place from the ruptured sac of a left Fallopian tubal pregnancy. The tube and sac, together with the ovary, were removed. The sac was about one and half inches long and three quarters of an inch in thickness, and was ruptured at its centre. It was situated one and a quarter inches from the uterine end of the tube. The fimbriated orifice was not closed, but no bleeding had apparently taken place from it. The patient has made a good recovery.

Carcinoma of the Body of the Uterus.—Dr. W. **Walter** (Manchester) showed a uterus removed by vaginal hysterectomy from a nulliparous woman, æt. 62. She had passed the menopause ten years. The uterus was enlarged, but the cervix was normal. Slight loss of flesh and occasional metrorrhagia were the only symptoms. The vagina being narrow from senile changes, division of the uterus was necessary before hysterectomy was possible. The whole of the fundus and body of the uterus was extensively diseased, the microscopical sections showing the appearance of adenocarcinoma. It is unusual in so advanced a case of cancer of the body of the uterus as this, to note an entire absence of pain.

The specimen was discussed by Drs. H. Briggs, Arnold Lea, Lloyd Roberts, and J. E. Gemmell, and Dr. **Walter** replied.

Dr. E. O. **Croft** (Leeds) showed a specimen of *Bilateral papillomatous ovarian cysts*, removed from a 7-para, æt. 44. The tumours presented the naked eye characters of ordinary multilocular cysts with the presence of a few scattered warty growths on their surfaces and within some of the cysts. There were also a few minute papillomata on the posterior surface of the uterus. The tumours were about the size of an infant's head, and a closed fist respectively. A nodule of growth was also found in the omentum, which was freely removed. Microscopically the appearances were those of columnar-celled carcinoma. The fact that with such advanced disease of both ovaries, the patient should have passed through a normal labour only two years before, and after suckling the child that menstruation had recurred naturally until the time of operation was remarkable. The patient had suffered from pain and had noticed a lump in the body about nine months before.

Dr. **Lloyd Roberts** (Manchester) showed the fœtuses from a *case of Quadruplets*. The patient, æt. 27, was delivered at the sixth month of her fourth pregnancy. The previous pregnancies were single births. The labour lasted twenty-four hours. The fœtuses were born at intervals of fifteen minutes, three of them having been alive at birth. The presentations were two vertical and two pelvic. There was much liquor amnii and some post-partum hæmorrhage. The placenta was single, four distinct amniotic sacs being enclosed in a single chorion. The patient made a good recovery and is now pregnant again.

Germany.

[FROM OUR OWN CORRESPONDENT.]

Berlin, November 1st, 1902.

At the Society for Innere Medizin Hr. v. Leyden related a case of

Paralysis of the Lower Extremities from Lightning.

The external clothing of the injured man was intact, but the shirt was completely carbonised, and on the skin over a full third of the whole superficies of the body were burns, in very varying degree from the slightest to the most extreme. In various parts of the body there was stellate burns. The head was quite uninjured. It was suspected that the lightning had struck the metal buttons of the shirt, and had passed thence to the right trouser-pocket, where the purse was, as the burning was most severe on that side. The speaker observed that the restaurant on the summit of Piz Languard where the accident took place, had been twice struck by lightning during the previous year. A lightning rod had been provided, but it appeared to be a doubtful protection from lightning.

At the meeting of Physicians and Scientists, Hr. Monti discussed

Serum Exanthems.

He said it was certain that diphtheria antitoxin was harmless, and that it could not be looked upon as the cause of serum exanthems. The former suspicion also, that serum exanthems were caused by streptococci, or by the small quantity of phenol of the serum was unfounded. It was most probable that the explanation given by Oertel was the correct one, viz., that such exanthems were the result of an injection of an albuminous fluid of a different species of animal and causing intoxication in the blood. This view had been confirmed by the experiments of Johannespen and himself. He described his own experiments and the clinical appearances that followed. The quantity of the serum injected appeared to be of importance. The larger the volume of the serum injected the more frequent was the following exanthem. Since serum of higher therapeutic power had been employed, whereby the volume of the serum injected had been diminished, these serum exanthems had become less harmful and less frequent. Such exanthems now appeared in only 3 per cent. of his cases. In order to avoid them as much as possible, however, the following rules should be observed:—

1. Only serum that is perfectly clear should be used.
2. If the serum be cloudy it should be warmed before use to 35° C., and it should only be used when after repeated warming the turbidity has completely disappeared.
3. The same applied to serums that had been kept for some time and show a white flocculent deposit.
4. High potency serum should be selected, so that it be not necessary to inject more than 10 ccm.
5. As a precautionary measure it would be well to recommend repeated warmings of the serum up to 35-5° C. This can be done without lessening its activity, and when larger volumes were required, by this means the cocci development of exanthem will be best destroyed.

Hr. Ledermann spoke on

The Bactericide Preparations of Various Yeast Preparations.

He spoke of the results obtained by Landau and Albert in the treatment of vaginal disease by active yeast. He mentioned also the observation of Albert that sterile yeast still possessed this property. After Lassar, Brocq and other dermatologists had recommended the internal use of yeast in the most varied dermatoses, the speaker, in company with Hr. Klopstock, had sought to confirm the bactericidal action of yeast by animal experiment in the Institut for Medical Diagnosis, without being able to come to any definite conclusion, however, as they had not been able to set up the skin diseases required in the animals experimented on. They could only show the harmlessness of feeding rabbits with compressed yeast. They had to fall back therefore on reagent experiments *in vitro*, and endeavour to determine the action of the various kinds of yeast recommended for use in skin diseases upon bacteria, in which grape sugar, peptone, and bouillon were inoculated alternately with typhoid bacilli, with staphylococci, or the colon bacilli. After various periods of fermentation the following results were obtained:—

1. Typhoid bacilli were killed by fermenting yeast in twenty-four to forty-eight hours, by compressed yeast after twenty-eight hours, by levulose after seventy-four

hours; while furunculin and a yeast cell pure cultivation did not affect the growth.

2. Staphylococci were killed in the same way after forty-eight to fifty-four hours, by compressed yeast after twenty-four to fifty-four hours, by levulose after seventy-four hours.

3. Colon bacilli were killed after seventy-two to seventy-six hours, by compressed yeast after twenty-four hours, by levulose after seventy-four hours. Furunculin and yeast cells in pure cultivation had no influence on the growth of staphylococci and colon bacilli. Rapp had recently arrived at similar conclusions, so that the bactericide action of the yeast preparations said to be active appeared to be certain.

In conclusion, it was recommended that when yeast was given internally the food should be as amylaceous as possible.

In the department for Forensic Medicine, Hr. Kratter Gratz spoke on

The Determination of Animal and Human Blood.

Several investigators had found that blood serum of rabbits which had been injected for a lengthened period with blood of another kind of animal or man, acquired the property of setting up precipitation only in solution containing the blood of the animal with which they had been previously treated. On this had been based a method of distinguishing human from animal blood forensically. The speaker had tested the method as to its practical value, and he uttered a warning against its present introduction into forensic cases, as in the hands of only moderately skilful people errors having very serious consequences might occur.

Austria.

[From our own Correspondent.]

Vienna, November 1st, 1902.

Ephemeral Glycosuria following Injuries.

At the "Naturförscher" Borchard brought before the meeting several observations of injury to the head followed by the temporary appearance of sugar in the urine.

The first patient had 1·5 per cent. of sugar and 1·2 of albumen, which disappeared twelve hours later; but after another pause of twelve hours blood corpuscles and casts appeared in the urine.

In another case, after a similar injury to the head, the same conditions appeared, but the patient unfortunately died. The post-mortem examination revealed nothing in the fourth ventricle or cerebrum, but there was a cloudy condition of the uriniferous tubes and glomeruli. Borchard attributes the temporary glycosuria and albuminuria to a disturbance of the circulation of the kidneys, and not to any injury to the brain; neither is it due to the ordinary morbid conditions that bring about the persistent condition; nor can we attribute it to alimentary glycosuria, since no foods likely to cause it were given in either case.

In the discussion that followed Stolper said that he had met with glycosuria after similar accidents to the spinal column.

Neugebauer remarked that Stolper's cases of analgesia in females required closer scrutiny before he could accept them as relevant. These cases of sacral segments are always fraught with a certain amount of suspicion, and this was true in respect of both the conus and root affections.

Pulmonary Anæsthetisation.

Kuhn raised the question of pulmonary anæsthetisation direct. He thought we had waited and searched a long time for an anæsthetic centre in the nervous system without much hope of immediate success.

Trendelenberg's observations that anæsthesia was easily obtained when applied direct to the wound in tracheotomy seems of such importance that such operations might be performed with advantage by applying the narcotising agent direct to the lung. This method of administering the drug is more rapid and efficient, with less danger of over dosing, than when exhibited in the usual way. Spasm of the glottis or asphyxia by mucous membrane is unknown, as well as the subsequent vomiting and retching which often follows recovery from large doses of the drug. In reply to Eiselberg he said he had narcotised in this way in fifty cases.

Landerer thought this form of treatment would be unsuccessful in an alcoholic subject.

Kuhn replied that the patient must commence with brom-ethyl, giving the chloroform later.

Eiselberg thought that intubation would not be so easily done under the narcotic. Fink desired to see an example before he would pass judgment.

Wohlgemuth doubted if any narcotic could be relied upon not to produce vomiting. During the last few years he had devoted a good deal of personal attention to the subject even to oxygen and chloroform, but was unsuccessful. Neither the anæsthetic nor the mode of administration have any effect in checking it; some individuals with a minimum dose suffered from sickness, while others with a large dose escaped.

Medullary Anæsthesia.

Neugebauer related experiments with sterilised tropacocain to a dangerous degree of intoxication, and he had arrived at the conclusion that it was only useful in cases of operations on the legs, where general anæsthesia was not so well borne.

Preindlsberger said he had performed thirty operations with this drug under deep intoxication with the best results. In females the analgesia was perfect. The injections are best borne on the upper part of the pelvis.

Treatment of Tuberculosis.

Landerer related his success in emphysema and tuberculous abscesses in the lung, which he treated by section.

The opening of the chest in tuberculous cases was not a danger if carefully done in cases other than the miliary form. Stationary cases always gave the best results. Tubercule caverns of the lower lobe should always be treated by section He drew attention to the care necessary in healing, which was often spoiled by the cicatrix. In coxitis rapid healing of the wound often produced such contraction as to determine spontaneous dislocation of the epiphysis.

Hofmeister related a strange case of non-tuberculous cavity in the lung that he resolved to operate on, which healed up and left a cavity. On re-opening the cicatrix the cavity disappeared.

Boschard thought we had far too few cases to establish a principle upon. Quincke showed some time ago that the healing of cavities was hardly possible.

HYPERTROPHIED MAMMÆ.

Wirshaupt showed photographs of hypertrophied mammæ associated with pregnancy which he removed, each weighing 6,700 grammes, or 14·74 pounds.

HARE-LIP—A WOLF PALATE.

Springer reported the result of fifty-three cases in the "Josef Kinderspital." They do not operate during the first year for cases where the gum is split, to avoid enteritis, nor before six months of age, while the lip alone is cleft. In thirty-one cases operated on no death occurred, although eight of them refused to heal. It is rather peculiar that the functional results are not always parallel with the anatomical repair, as children with imperfectly healed lips often articulate better than the ideal result as far as the operation is concerned.

Hacker was in favour of Schleicher's infiltration method.

Bringer recommended Kuster's operation with the two flaps, and believed better results were to be obtained from it.

Riedel was in favour of keeping the head hanging down while operating as it obviated pneumonia.

Eiselberg praised Kuster's method, as it gave both better function and anatomical results.

The Operating Theatres.

ROYAL FREE HOSPITAL.

INTESTINAL ANASTOMOSIS FOR FÆCAL FISTULA COMMENCING WITH TUBERCULOUS CÆCUM.—MR. ROUGHTON operated on a man, æt. 35, who a year previously had presented himself at the hospital suffering from vomiting, and a lump on the right side of the abdomen. An exploratory operation was at that time performed, and a mass of tuberculous disease was found to involve the cæcum. A small piece of tissue was removed for microscopic examination, and the diagnosis confirmed. Three days after the operation there was discharge of fæcal matter from the wound. At that time the man's general health was extremely bad; he, however, had steadily improved after his discharge from the hospital, and was at the time of the present operation in fairly good general health, but his fæcal fistula still remained and was a source of such serious inconvenience that he was compelled to seek further aid. On exposing the abdomen a fistulous opening was seen in the middle of a scar situated in the right iliac region, the skin in the immediate neighbourhood being much inflamed and obviously very septic. Before proceeding to operate, Mr. Roughton thoroughly occluded the fistula and the surrounding septic area with gauze and collodion. He then made an incision about four inches long about an inch to the right of the middle line. On exposing the rectus muscle this structure was drawn outwards, but not incised; the posterior sheath of the muscle and the peritoneum were opened opposite the superficial incision. The lowest part of the ileum was found to be much thickened and dilated, and studded with tubercles; its mesentery was nearly half an inch thick, and of tough leathery consistence; on tracing it towards the situation of the fistula it was found to enter a dense mass of tuberculous disease occupying the situation of the cæcum and of the ascending colon. The transverse colon, which was very thin and empty, was then brought down into the wound and clamped with rubber tubing passed through the mesentery. A portion of the distended ileum free from tuberculous disease was then clamped with Doyen's forceps, and an anastomosis between the two portions of bowel effected by a double row of sutures without the aid of any mechanical contrivance. The peritoneum and the posterior sheath of the rectus were sewn up by a continuous silk suture, the rectus muscle was slid back into place; the anterior sheath and skin were next similarly united and the usual dressings applied. Mr. Roughton said that it was remarkable that this patient had so greatly improved in general health during the year that had elapsed since the first operation, although the tuberculous disease had remained *in statu quo*. It was, he remarked, a common experience for tuberculous disease of the peritoneum to disappear after abdominal section, but in this case the disease remained, although the general health improved. He pointed out that the very septic condition of the fistula and of its neighbourhood had induced him to make his incision at some little distance from the seat of disease, as he feared that any operative procedure undertaken *in situ* would have been attended by enormous risks. He said that the method of opening the abdomen he had adopted in this case was attended with less risk of subsequent ventral hernia than when the linea alba was incised, because the injured rectus muscle intervened between the two layers of incised and sutured tissues. He thought the advantage of this method over a similar proceeding which is sometimes employed at the outer margin of the rectus was that the nerve supply of the muscle is not interfered with or damaged. He considered that the dilated and hypertrophied condition of the small intestine afforded ample evidence that the passage of fæces through the diseased cæcum was considerably obstructed. It was, he remarked, a well recognised principle in surgery that a fistulous opening will not close so long as the normal passage with which it communicates is obstructed, therefore the first requirement in this case was to afford a free passage for the onward flow of fæces; this was the object with which the operation of anastomosis was performed. Mr. Roughton said that if all went well it was quite possible that the fistula might close without any further operation, yet it might perhaps be necessary at some future period to attack the fistula itself.

It is satisfactory to state that the patient made an uninterrupted recovery from the operation, and that six weeks afterwards when he left the hospital, although the fistula had not completely closed, there was no escape of fæces from it, nor had there been any since the operation.

A Fatal Dispensing Error.

AN inquest was held last week on a child, who succumbed to the effects of a poisonous dose of strychnine inadvertently dispensed by Mr. H. Laird Pearson, of Birkenhead. Mr. Pearson was so confident of his innocence of error that he actually swallowed a dose himself with serious results. Another child of the family who was given some medicine from the same bottle also suffered severely, but was saved by prompt treatment. The parents of the children publicly expressed their sympathy with the doctor in his trying position, an act which reflects great credit upon them.

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"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 5, 1902.

THE BERLIN CONGRESS ON TUBERCULOSIS.

THE principal result of the Congress on Tuberculosis, which has just taken place at Berlin, is to give prominence to the problems which still await solution. Until these points have been cleared up no practical conclusions are possible, and to attain this end many years of patient observation and investigation will be required. The discovery of the bacillus of tuberculosis marked, it is true, an epoch in the history of the disease, but although we have learned to recognise the enemy against which we have to fight, we are still in great measure without arms wherewith to conduct the campaign. We have yet to determine which of the two etiological factors, the bacillus or the soil, is the more important, whether our efforts should aim at the destruction of the *materies morbi* or whether we ought to concentrate our energies on the soil with the object of rendering it capable of resisting the invasion. In Germany the bacillus is generally accorded the foremost place, but elsewhere, judging from the measures adopted, most importance is attached to reinforcing the resistance of the tissues. Intimately connected with this question is that of the identity of bovine and human tuberculosis, and no stringent prophylactic measures can be hoped for until this much-debated question has been settled. Of the transmissibility of the disease from man to man no serious difference of opinion obtains, so that one prophylactic indication, at any rate, is available for instant use. In his endeavour to controvert Professor Koch's conclusions, M. Nocard, of Alfort, did what lay in him to introduce fresh elements of uncertainty into the discussion by stating that there is not one specific agent in tuberculosis but several, and that while cattle are refractory to certain of the micro-organisms associated with the disease they are perfectly susceptible to others. That the bacilli met with in this connection vary greatly in virulence is no doubt true, but that fact does not justify their being described as of various species. The arguments re-advanced by Professor Koch are not more convincing now than they were when first enunciated at the London Congress. He declines to admit that the prevalence of intestinal—or shall we say abdominal?—tuberculosis in infants is evidence of alimentary infection, on the ground that indubitable instances of primary intestinal lesions are extremely rare. His objection, however, reposes on the assumption that infection by the mouth necessarily manifests itself by infection of the intestinal structures, but to assume this is to beg the question, indeed, there are a number of experimental data on record which go to prove that the bacillus, intentionally introduced into the alimentary canal, often works out its destiny in the lungs rather than in the intestinal structures. Since the bacillus, however introduced, selects, at one time the mesenteric glands, at others the lungs and, less frequently, attacks the synovial membranes of joints, the meninges, the vesical mucosa, &c., it is difficult to avoid the conclusion that it is the nature of the soil rather than the action of the specific agent which determines the susceptibility. The general impression left by the discussions is that the principal danger, if indeed, not the only one, lies in the undue susceptibility of the tissues to adverse influences. Just as cholera and plague have been stamped out of England by a stricter application of the laws of hygiene, which have conferred a measure of protection almost amounting to immunity, so the application of the laws of hygiene, aimed at the improvement of the social conditions which prepare the soil for tuberculosis, may, in the long run, render the race refractory to the microbe of this disease. This conclusion is absolutely in accordance with all that we know concerning the spread of infective maladies. Without declaring impossible the discovery of an immunising serum, the introduction of sanitary measures tending to assure a standard of health incompatible with infection would unquestionably be far more beneficial to the community.

PREVENTION OF ENTERIC IN ARMIES.

DR. LEIGH CANNEY has again brought his views on the prevention of typhoid before the medical profession, on this occasion at a meeting of the Medical Society of London. Dr. Canney's views are by this time well known, and we have already directed attention to them in our columns. Reform the water supply of armies, he says, and all other sources of enteric infection may be neglected. It is difficult to accept this dogma in its entirety, especially in view of certain recent epidemics, and the aerial convection of infection on particles of dust must be given its place. Colonel Davis, R.A.M.C., when discussing Dr. Canney's paper, drew attention to an epidemic at Quetta, where, although the entire drinking water was supplied from an un-contaminated source, there was an outbreak of typhoid. The origin of this outbreak was found in a series of shallow trenches which received typhoid dejecta, and which were situated in the eye of the prevailing wind; and this was clearly proved by the fact that the battalion which was nearer the trenches and more in the direct line of the wind suffered out of all proportion to the other battalions. As we understand Dr. Canney, his point is that but for a preliminary inoculation of the army by water-borne infection there would be no infected dust to repropagate the infection. This may be so, but how did the water become infected? To be strictly logical Dr. Canney should also decry the importance of water-borne infection as soon as the original source of the water infection was discovered. The course of events appears to be that the prime source of infection infects the water, the water infects the army, the army infects the soil, and the dust from the soil reinfects the army and the water. If one could remove the original source of infection before it produced its effect then all the secondary sources of infection might be neglected; but when once a secondary source of infection is established, and typhoid occurs, all the other possible sources of infection become equally as important, and must be as carefully watched. It seems to us that by neglect of this principle Dr. Canney's arguments lose their force. No one will question for a moment the advisability of guarding the water supply, and adopting every precaution to ensure its sterility. and anyone who invents or designs a method of doing this, and one which is adaptable to the exigencies of active service, will have conferred a national benefit upon the country; but if, at the same time, he succeeds in drawing off attention from the possibility of other avenues of infection, he will perhaps more than counteract the good he has done. As Dr. Childs pointed out in his speech at the Medical Society, water-borne epidemics occurred with such explosive violence that they made a deep impression upon the mind of the public and the medical profession; and to this result we may add that, in civil life at all events, infection from polluted soil and such-like causes gives rise to sporadic cases which do not attract the same amount of attention. In the case of an army in encampments, however, the case is different. Even if the water supply is and remains pure, a single case of typhoid in which the dejecta are neglected may lead to the infection of soil, the infection from that to other cases, and so on, until the outbreak becomes an epidemic. There is, however, one very practical point in favour of Dr. Canney's insistence. The protection and sterilisation of the water supply is possible, the protection of an army from infected dust is practically impossible, save by withdrawing it altogether from the infected area. This, in the case of military operations, may be out of the question. Under such circumstances prophylaxis demands not alone a sterilised water supply, but the most careful attention to sanitation.

PERSONATION AND THE GENERAL MEDICAL COUNCIL.

The recent conviction of a medical impostor, named Herring, to five years' penal servitude for personation points a moral which, it is to be hoped, will linger long in the memory of the public and of the medical profession. The circumstances of the case were of an extraordinary nature, inasmuch as the prisoner, although void of the least shred of medical training, for several years carried on a medical practice under the title of the fictitious firm of "Dobie and Hoffmeister." At length the day of reckoning arrived, through the chance avenue of a coroner's inquest. As a result of the proceedings in that court the accused was prosecuted by the police for wilful and corrupt perjury in having tendered evidence as a registered medical man. Further developments led to a charge of manslaughter, which was sustained by evidence of a startling and terrible nature. It was shown at the Old Bailey last week that the prisoner treated the deceased woman, who was the subject of the inquest, for inflammation of the bowels, whereas she died of strangulated hernia. Under these circumstances the prisoner may think himself fortunate to have escaped with a conviction on the lesser charge of manslaughter. The law, however, is notoriously lenient towards offenders who injure his Majesty's lieges by the unqualified practice of medicine, either with or without the assumption of a medical title. Indeed, if any person avoid calling himself or herself a "doctor," he or she may conduct medical practice without let or hindrance. In other words, the State which carefully regulates and controls the duly qualified practitioner allows the charlatan in ninety-nine cases out of a hundred to flourish like a green bay tree at the expense of the public. Even where an impudent impostor is caught and punished, as in the case of Herring, it is usually brought about by the merest chance, and not by any proper system of safeguarding the official *Register*, even if it were compulsory for all medical men to have their names entered upon that *Register*. As pointed out emphatically in The Medical Press and Circular many years ago, the present system of medical registration is so badly framed and administered as to open the door to manifold frauds. The truth of that contention has been abundantly proved by numerous cases of personation. There can be no disguising the fact that the registration system of the General Medical Council is a failure. It is unbusinesslike, and fails in such elementary points of identification and corroboration. Under the existing conditions of medical practice in the United Kingdom there would be little difficulty in drawing up a satisfactory system of registration of qualified medical practitioners. In the opinion of many competent judges it would be necessary to make registration compulsory and its renewal periodical. The duty of maintaining the *Register* would fitly be entrusted to a body charged with the co-ordinate duty of prosecuting irregular practitioners of all kinds under powers that would have to be obtained in a new medical Act. There is little hope of any real reform at the hands of the General Medical Council. That body is by its constitution irresponsible, and in consequence it naturally enough shirks duties that would be no less anxious than toilsome in favour of the protection of the vested interests of which its members are for the most part representative. Whatever the contention of the present body may be, it is clear enough to everybody that the Council was called into existence to protect the interests of the public on the one hand and of the medical profession on the other. It seems likely, judged in the light of past experience, that neither function will be properly discharged until the Council is reconstituted upon that broad electoral basis without which it is hopeless to look for an unselfish, energetic, and progressive policy. The ideal body would be desirous of keeping in line with modern social aims and methods, while at the same time it would keep in view the popular interests entrusted to its care.

Notes on Current Topics.

Infant Mortality in France.

M. Bertillon has of late been rendering valuable assistance to the French Republic in general by drawing fresh attention to the mortality among infants supported at public charges. Some time since a law was passed entitled, in honour of its author, "La loi Théophile Roussel," which enacted that the Minister of the Interior should publish each year a detailed statement of the mortality of infants under one year of age. and especially the mortality of those who are placed out to nurse, to be weaned or brought up by hand, at the public expense. The object of, and the necessity for, this law was apparent, but, in spite of that, it was allowed to fall into desuetude, and no returns were prepared. To remedy this omission, M. Bertillon has published these statistics in a recent article in the *Revue d' Hygiène* for August of this year. From this article we learn that the mortality among infants who are between the ages of ten days and one year, and who are brought up at the public expense, was 203 per 1,000, while that of infants generally throughout the country at the same age was 128 per 1,000; consequently the mortality among the former class exceeded that among the latter by nearly 60 per cent. As a result of this state of affairs, while the birth-rate in England for the years 1874-1898 was 32·6 per 1,000, and the death-rate 19·4, the birth-rate in France during the same period only exceeded the death-rate by 1·8 per 1,000, and on several occasions of late years was actually lower than the death-rate. This is a serious state of affairs, and M. Bertillon deserves credit for having called attention to it. It is by checking such leakages of infant life—if we may so term an avoidable mortality—that France will best replenish her population. In this connection attention may be drawn to a statement made at a recent meeting of the Academy of Moral Sciences in Paris, that while the population of the rest of Europe had increased 129 per cent. during the last 100 years, the population of France had only increased 44 per cent.

The Critical Wit of a Dipsomaniac.

The professed power of curing that most obstinate distemper, habitual inebriation, led to the display of an eminently Hibernian law-suit, which was heard last week in the Skibbereen Court House, before the County Court Judge. Thomas E. Cowant, William Vincent O'Brien, and Jeremiah Twomey, trading as the "Hagey Institute" for Inebriates, Dublin, and professing to cure patients of the habit of intemperance, sued a former patient for £26 5s., being for board, lodgings, medical treatment, and attendance in the institution during the month of April, 1902. The examination of the defendant excited the risibility of both lay and professional audiences to a degree seldom witnessed even in that laughter-loving corner of the British Empire. He avowed that he had first refused to have anything to do with the Institute, and that he was led to it by his brother, after the latter had treated him to a bottle of whisky in the train. He was drunk going there, and was drunk when leaving. Mr. Twomey personally conducted him to the theatre, and then brought him back to what he called the Institute, but which defendant called a fraud. "They gave him a dose of 'gollops' the first night, and only for that he would be all right in a few days; as it was, he could not stir. He got whisky in the Institute, but he generally went across to the 'pub.' across the way, where he indulged in what stuff he liked. He left because he came down town, and meeting some friends he went on a 'terrible batter,' and did not turn up after. That was the result of his treatment at the 'Hagey.'" After the perusal of this evidence, which the defendants do not appear to have been able to rebut, we are neither surprised nor disappointed that his Honour Judge Bird dismissed the case.

Curious Sequel to a Case of Abortion.

Rigidity of the cervical tissues, sufficient in degree to delay the expulsion of the fœtus at full term, is not a very uncommon occurrence, though it is by no means as frequent as in the old days when a "rigid os" furnished the stock diagnosis of the unskilled obstetrician. In consequence of the recognition of the abuse of the term in the past, the tendency, at present, is, perhaps, to overlook the possibility of such a condition, and to endeavour to account for a delay in dilatation by any other reason. That such a condition can occur is, however, undoubted, and that it can sometimes reach a very pronounced degree is shown by a case recorded in a recent number of our latest gynæcological contemporary, *American Gynæcology*. This case was one of threatened abortion at the fourth month, in which, with the object of hastening the expulsion of the fœtus, attempts wer made to dilate the cervical canal with the Goodell-Ellinger dilator. The resistance, however, was so great that the canal could not be stretched to more than a centimetre in diameter, and further dilatation was accordingly left to the natural efforts. Twenty-four hours later the fœtus was expelled, but, on making a vaginal examination shortly afterwards, the external os was found to be unduly small. Three days later, a further and more complete examination was made, when a large oval laceration was discovered in the posterior wall of the cervix, about a centimetre from the edge of the os externum, and involving neither the os nor the vaginal vault. The fœtus, in an unruptured amniotic sac, had passed through this tear. It is difficult to account for such an occurrence save on the supposition of strong uterine contractions and extreme "rigidity" of the cervical tissues. A similar case has been recorded by Gebhard. It is probable that such cases are intimately connected with the phase of abortion known as cervical abortion—a condition which leads to extreme thinning of the cervical wall.

The London County Council and Small-pox.

THE compulsory notification of chicken-pox within the Metropolitan area has been prolonged for a period of two months from November 7th, and it is notified that the arrangement whereby certain medical men could be called in for purposes of consultation with regard to doubtful cases of small-pox will not be continued after November 6th. This looks as if the medical advisers of the London County Council did not attach much importance to the statement that a recrudescence of the epidemic is likely to occur with the advent of cold weather. We trust their scepticism will be justified by events.

Dental Antiseptics.

MR. EDMUND ROUGHTON has lately drawn attention, in the course of a series of lectures on morbid conditions of the mouth, to the importance of obtaining oral asepsis in mouth operations. The concluding words of his lecture would seem to be especially intended for the perusal of dental surgeons :—"I would strongly urge that all those who use instruments of any sorts within the mouth, should make it an invariable rule to sterilise them both before and after use." We fear that in many cases Mr. Roughton's warning remarks are far from unnecessary. Not alone among dental surgeons, but sometimes among medical men, the notion that the antiseptic power of the saliva is sufficient to counteract the effects of dirty instruments has been allowed to render the operators careless in regard to asepsis As, of necessity, dental surgeons have the largest share of mouth operations, so they furnish the greater proportion of wrong-doers in this respect. There are, of course, many dental surgeons whose asepsis is as carefully attended to as is that of an abdominal surgeon, and there are many more who adopt reasonable precautions, but, on the other hand, there are a certain proportion who, we fear, have not even the most elementary notions of the importance of, or the means of obtaining, asepsis. In consequence, every now and then, cases are met with of septic infection in connection with dental operations, though fortunately this infection is usually of a local nature. Such cases should not occur, and, if attention were only paid to the principles Mr. Roughton enunciates, would soon become things of the past.

Disinfection for Yellow Fever in Havana.

THE American occupation of Cuba has, at any rate, resulted in the carrying out of definite efforts to diminish the mortality of, or, if possible, eradicate altogether, the endemic yellow fever of that country. The establishment of the casual relation of a mosquito, the stegomyia, to yellow fever has enabled prophylactic efforts to be turned in the right direction. The first steps taken consisted in the most careful adoption of the usual methods of disinfection and quarantine, in the houses of all fever patients. Then, orders were given that all receptacles containing water were to be kept mosquito-proof, and that all stagnant collections of water which could not be drained were to be treated with oil. With the object of preventing the stegomyia, which were not thus destroyed, from biting yellow fever patients, and so becoming inoculated, all hospitals and dwellings with yellow-fever patients were thoroughly screened, and inspectors were put on guard to see that the screens were not opened ; while, in order to kill infected mosquitoes within the hospitals and houses, rigid methods of disinfection were carried out. These proceedings are very radical and must have entailed an enormous amount of trouble on the part of the sanitary authorities, so that it is satisfactory to learn that, so far as statistics relate, in consequence of them during the year 1901 there were only eighteen deaths from yellow fever, a number which is less than any since 1856.

The Tuberculous Chest.

IN examining patients in regard to the existence of pulmonary tuberculosis much valuable information may be derived from careful observation of the shape of the chest. It is generally held, even among medical men, that the shape of the chest in individuals predisposed to tuberculosis is flat, but a large number of measurements made on the living subject by Dr. Woods Hutchinson, whose results have since been confirmed by independent observations carried out by Drs. W. A. Evans and McHugh, of Chicago, tend to prove that the typical "weak chest" is deep rather than flat, resembling, in fact, the chest of an adolescent. Such a chest, moreover, is narrow above and flanges out below, to borrow the expression of the American observers, like the bottom of a fashionable coat. The tuberculous chest, then, may be described as "relatively deep and relatively narrow," the term "relatively" being used because in all such measurements it is necessary to take note of the length of the trunk. This type of chest is one associated with under-development, and this fact affords a plausible hint as to the real nature of this so-called tuberculous predisposition. The organism is one in which the tissues, including the bony framework, have failed to obtain perfect development, their powers of resistance being correspondingly reduced. If this view be correct, it has an important bearing on the prophylaxis of tuberculosis. Obviously the predisposition arises not from the extreme virulence of the bacillus but from the constitutional failure which finds expression in imperfect development, and the only hope of safeguarding these subjects from the risk of infection lies in measures having for object to reinforce their vitality. Inasmuch as in a large proportion of these cases the defective development is the result of defective hygiene and inadequate nourishment, treatment based on these principles will usually be followed by marked improvement. Even when too late to be prophylactic such measures may still be effectual in staying the hand of the destroyer.

Industrial Colonies for Consumptives.

It has long been noticed that many cases of consumption which improve very much during sanatorium treatment, on return to the ordinary conditions of life more or less speedily relapse to their former or a worse condition of health, and, indeed, the after-history of many so-called "cures" is a melancholy study. To prevent this deterioration it has been proposed from time to time that colonies of an industrial nature should be founded, to which patients might be drafted from sanatoria, when sufficiently strong, and where they might, amid healthy surroundings and under proper *régime*, be able to pursue their ordinary avocations, or, where these are unsuitable, be taught others. The work of each patient should, of course, be adapted to his particular physical ability, and the effect of his labour should be watched by competent medical authority. The expense of such a colony should not be very great, as, if cases were carefully selected, the work of the residents should contribute very largely to its maintenance. If started on a small scale in connection with some of the larger sanatoria, the success of the project could be fairly well tested before embarking on any extensive scheme, and the excellent example of the Chalfont Colony for epileptics should give some useful hints in its elaboration.

Yeast in the Treatment of Small-pox.

There was a time, not so very far removed, when barm, or beer yeast, was the most popular antiscorbutic, using this term in its non-medical signification. Even at present it rejoices in a certain prestige in the prophylactic and curative treatment of furunculosis, though data are wanting on which to base its reputation. Quite recently several Italian, French, and Spanish practitioners claim to have obtained excellent results from its use in the treatment of small-pox, which is stated under its influence to have been greatly modified in its course, being, in fact, converted into a comparatively benign affection. The treatment must be begun early, that is to say, on the first appearance of the pustules, whereupon the temperature speedily falls, the eruption runs a mild course, and recovery takes place by uninterrupted lysis, consequent upon the effect of the treatment in preventing suppuration of the vesicles. Moreover the pitting which usually follows the maturation of the ordinary pustule is conspicuous by its absence, the constitutional disturbance being reduced to a minimum. This method of treatment is reported to have given equally satisfactory results in other exanthems, *e.g.*, in measles and erysipelas, the evolution whereof is favourably modified thereby. The observations recorded in support of this view are numerous and worthy of consideration. Its action is attributed to the presence in the fluids of the body of the soluble products elaborated by the fungus which are credited with a quasi-specific influence on the micro-organisms of these diseases.

A Soldier's View of Medical Science.

Lord Roberts, at St. George's Hospital on Thursday last, took the opportunity of testifying to the good services rendered by science to the soldier. He showed that to none was gratitude more due than to those who seek to secure the best conditions for the maintenance of health in camp and quarters, and are ever ready to do their utmost to relieve the sick and tend the wounded. Modern improvements had done much, and these had been supplemented by personal devotion. Lord Roberts said he had strong admiration for the medical profession, and sympathy with the work of doctors, and in this he spoke the sentiment of the Army he had the honour to command. We trust that the Commander-in-Chief will do his utmost to secure that respect and regard should always be accorded to medical men who place their professional services at the disposal of the War Office.

Skirts, Sanity, and Sanitation.

The skirted sex have once again been discussing the advantages of "bloomers," and detailing the sanitary sins of skirts. Mankind, from the judge upon the bench to the little whooping male ragamuffin in the road, has insisted on the necessity of supporting the skirt. Womankind, it would now appear, if the privileged reporter who obtained admission to a recent solemn discussion at the Pharos Club is to be believed, has bowed to the masculine majority outwardly, but inwardly the rebellion is maintained, for confession has been made that these "rational reformers" all wear "bloomers," or what we more euphemistically term "knickerbockers," *under* the dirty, defective, and degrading skirt. Although only one lady at the recent conference ventured to appear without a skirt, that much-admired article of apparel was proclaimed as the etiological factor in many ills. Skirts impeded work, were dangerous in cycling, often led to injury or death by fire and falls downstairs, gathered filth in the streets, dragged at the legs and produced unnecessary fatigue, and required carrying so as to be an intolerable burden to women with parcels or babies. Doubtless many skirts are both artistically and hygienically defective, but, nevertheless, we think means may be found for correcting the latter without robbing the nether garment of its artistic advantages.

Miners' Phthisis and Rock Drills.

The fearful mortality from lung disease which, in years gone by, was regarded as inseparable from the occupation of mining, was markedly lessened by better provision for the ventilation of mines and by regulations having for object to check the contamination of mine air by dust; in fact, mining had been rendered a comparatively healthy, if still extremely hazardous, calling. The gradual introduction of rock drills, a step of immense importance from the point of view of efficiency, has incidentally subjected the workmen to the dust nuisance in an aggravated form. These machines produce an abundance of fine dust, the particles of which, when examined under the microscope, are seen to be beset with sharp, cutting angles. This dust, when inhaled, as it is bound to be in the absence of special precautions, exerts highly irritating effects on the pulmonary tissues and an exceedingly large proportion of the men consequently fall victims to what the late Sir Andrew Clark called fibroid phthisis, that is to say, a form of consumption resulting from long-continued irritation associated with fibroid changes in these tissues which thus become a favourable soil for the development of the specific organism of tuberculosis. The mortality from this cause in South Africa is reported to be appalling, and we have reason to believe that this mortality, and the means of preventing it, will receive the attention of the Colonial Secretary during his forthcoming visit. The means of prevention are simple and of common knowledge; all that is required is, on the one hand, to induce mine owners to insist on their adoption, and, on the other, to secure the consent of the workmen to their enforcement, for, sad to relate, the latter is by far the more difficult problem.

Diseases of the Stomach and Life Insurance.

The progress of scientific medicine and surgery is rapidly reducing the dangers of many serious maladies. In the case of ulcer of the stomach surgery now offers a reasonable chance of cure in several cases where medical treatment has proved of no avail. The common functional dyspepsia, however, are the gastric disturbances which the medical examiner for insurance is daily called upon to consider. The theoretical value of his investigation in that particular direction is unfortunately handicapped by the fact that the symptoms are almost entirely subjective; in other words, that the applicant under examination has it more or less in his power to hoodwink the physician. It is a curious fact that nowadays the state of the teeth and of the mouth generally is regarded as a powerful factor in the causation of dyspepsia, as it is of anæmia and of other general septic conditions. There are two serious diseases, at least, of the stomach which may be detected by physical examination, namely, dilated stomach and cancer. So far as the former formidable affection is concerned some recently published cases of cure by treatment with high-frequency electrical currents affords the utmost promise for future results. If a cure be thus obtainable the medical examiner will be able to eliminate one most serious condition from his disqualifying list, and submit a candidate so affected to re-examination. It is to be hoped that a similar solution awaits carcinoma of the stomach at no very distant date.

The Amateur Anæsthetist.

It is customary, when the subject of the administration of anæsthetics is under discussion, to deprecate in more or less pungent terms the assistance of the amateur anæsthetist. One can quite understand that hospital surgeons, accustomed to the highly-skilled assistance of the professed anæsthetist, experience a feeing of distrust at the prospect of having to put up with that of the average practitioner who is sometimes too timid and at times too rash in his manipulation of the drug. But almost every practitioner must be classed as an amateur anæsthetist in the sense that he lacks the training and experience of the adept; yet in the vast majority of instances the chloroform—for he always selects chloroform—has to be administered by him or not at all outside the big towns. Moreover, even in the large general hospitals of London the drug is in a large proportion of cases given by the assistant house surgeon or house physician, who are just as amateur in their way as the outside practitioner. Probably not one medical resident in a dozen in the London hospitals knows how to manipulate a Junker's inhaler or is, indeed, familiar with any other method than pouring the chloroform on to a towel or mask. We can never hope to make the average student an expert anæsthetist, no matter what pains are taken to instruct him in this department, for the simple reason that he does not get enough practice to keep him in training. After all, amateurishness in this sense is not fatal to the safe induction of anæsthesia provided the administrator be a man with a cool head and of careful habits, otherwise the mortality from this cause would be vastly greater than it is, and it is already unduly high, as our weekly record shows.

Arsenical Poisoning in Medical Practice.

The question of arsenical poisoning has been brought prominently before the public by a case still under investigation. So far as the evidence extends, whether the suspicions of the police prove to be well founded or the reverse, the possibility of such an occurrence suggests the likelihood of a medical practitioner overlooking a case of poisoning by arsenic. Under circumstances of intentional poisoning the symptoms are usually chronic, that is to say, they are far less pronounced than those of acute poisoning. In criminal administration the utmost care is usually taken to lull suspicion, and the medical attendant, however observant he may be, has no clue afforded him as to the real state of affairs by the conduct of nurses and friends of the patient. It is therefore hardly surprising that the progressive emaciation and bowel irritation are often referred to some obscure intestinal inflammation. Indeed, so misleading are the symptoms of chronic arsenical poisoning, especially in view of the fact that the course of symptoms is often irregular and atypical, that the detection by a medical attendant of the condition would rank as a distinguished diagnostic fever. When suspicions are once aroused the whole thing is capable of the readiest scientific investigation. It often happens, however, that suspicion is, so to speak, cumulative, and that the existence of criminal intent is arrived at only after a series of mysterious deaths. The cautious medical practitioner, bearing these facts in mind, will do well to test for arsenic when he is called upon to attend any chronic bowel disease incapable of satisfactory explanation in the light of ordinary experience. An analysis of the fæces would speedily furnish the key in cases of arsenical poisoning.

Another Poor-law Lunacy Scandal.

That Poor-law lunatic nursing is in need of somewhat drastic reform has long been a deep-rooted conviction of the man in the street. South London appears to be waking up to the necessity of treating offending officials with the strong hand. A few weeks since the Southwark Board of Guardians dismissed several nurses in connection with the discovery of unreported bruises upon the body of an ancient female pauper. The woman in question has since died, and at the subsequent inquest some startling evidence was tendered as to the treatment of inmates by nurses. The jury found that death was due to exhaustion and heart failure, and that there was no evidence to show how the bruises were caused. That view, however, seems hardly consonant with the testimony of a witness to the effect that one of the dismissed nurses struck the deceased two heavy blows on the stomach with her fists. The fact of the bruisés having been unreported lends a certain amount of colour to the theory that violence was committed. In any case the matter can hardly be allowed to remain in its present unsatisfactory position. It is announced that a member of the Southwark Board of Guardians, the Rev. W. J. Somerville, has appealed to the Local Government Board for an opportunity of presenting an appeal from the dismissed nurses, and offering to pay any legal expenses of such a course. The unwisdom of such a proposal must be evident to all who are acquainted with the necessary conditions of lunacy discipline. No one appears to have denied that the bruises were unreported to the medical authorities of the infirmary, and it is clear that an omission of that kind, were it allowed, would open the door to brutalities of a kind that are now happily rare in the asylums of the United Kingdom.

Sentiment and Surgery.

Every medical practitioner knows how largely the feeling of sentiment enters into the question of surgical operation. He is naturally concerned with the practical expression of that mental state so far as it influences the determination of patients or their friends with regard to procedures that he himself holds to be necessary. It would be interesting, and to some extent profitable, were it possible to trace the ultimate origin of this widespread sentimental objection to surgical operation. The excessive mortality that formerly attended anything of the kind in pre-aseptic days accounts for a great deal in the sum total of popular conviction. Before the advent of Listerian methods a wound or the removal of a finger-tip might sooner or later lead to death. The fear of excessive mortality after surgical operation has happily been done away with for ever, thanks to the genius of our distinguished countryman, Lord Lister. There are other deep-rooted motives at work, however, in the formation of the particular sentiment under discussion. The dread of personal deformity or mutilation, for instance, is often so great as to render the chances of death preferable as an alternative, more especially, perhaps, in the case of women. On the whole, it may be said that to overcome sentimental objections to necessary surgical interference is one of the most delicate yet indispensable duties which the medical man owes to society in general and to his patients in particular.

The Cooling of Houses.

A vast amount of ingenuity has been expended in the heating of houses, whereby the average citizen is enabled to defy the rigours of winter within his well-warmed castle. Little has been done, however, to counteract the opposite extreme of temperature, and enable him to live indoors in comfort despite the tropical heat of summer that is scorching up the outside world. In Baltimore it has been recently announced that a company has been formed for the purpose of house-cooling. Pipes are laid under the streets, and cold air distributed to consumers at a fixed charge, in much the same way that applies to gas or to electricity. The idea is simple, and likely to prove a commercial success in countries where a hot and long summer is the rule. In the United Kingdom a hot-air supply is needed far more than a cold, and it seems somewhat curious that in these days of manifold catering no agency for distributing heated air for domestic purposes has been started in some, at least, of our great centres of population. There is much to be said in favour of such a system, especially on the grounds of cleanliness, and the saving of labour in the household, to say nothing of the disproportionate and excessive cost of coal and other fuel in recent years. It may be interesting to recall the fact that the Houses of Parliament are supplied both with cold and with warm air, as may be required, by means of an elaborate system of purifying and of warming or cooling inter-chambers.

Changes in the Surgical Staff at King's College Hospital.

After a period of service in King's College, London, extending over twenty-five years, Professor William Rose, B.S., M.B., F.R.C.S., has resigned his appointments as Professor of Clinical Surgery and Senior Surgeon to the Hospital, and in place thereof has received those of Member of Council, Emeritus Professor of Surgery to King's College, as well as that of Consulting Surgeon to the Hospital. It is well that the College should thus honour one of its own students, for throughout his career Professor Rose has been associated with it. Entering as a student when Sir Wm. Fergusson was at the zenith of his career, Rose became a dresser, and finally a house surgeon, to the late baronet. Subsequently he became surgical registrar, was noted for his teaching ability, as well as for his manual dexterity, and was appointed to the staff in 1876. On the retirement of Mr. Henry Smith in 1889 he was elected Professor of Surgery, and on Lord Lister's retirement in 1891 he was appointed to the chair of clinical surgery, and became Senior Surgeon to the Hospital. He had already won for himself the reputation of being one of the most brilliant operators of the Metropolis, and his skill received general recognition. The ability which enabled him first to attack the Gasserian ganglion ought not to be lost to the service of humanity. We are glad to know that Professor Rose entertains no thought of retirement from practice, and that his other appointments will be retained. The rearrangement on the staff of King's promotes Mr. W. Watson Cheyne to the Professorship of Clinical Surgery, whilst Mr. Albert Carless becomes Professor of Surgery and Surgeon with charge of in-patients to the Hospital.

An order has been issued by the Local Government Board presenting regulations with regard to the use of small-pox hospitals for purposes of medical instruction.

The next session of the General Medical Council will open on Tuesday, the 25th inst.

PERSONAL.

Dr. Lapponi, the medical adviser to his Holiness the Pope, was announced last week to be suffering from appendicitis, and he has since been successfully operated upon for its relief by Professor Mazzoni.

Dr. W. H. Clements, late District Medical Officer, Southern Nigeria, has been appointed District Commissioner and Government Medical Officer at Cockburn Harbour, in the Turks and Caicos Islands, West Indies.

After some years' labour in Melbourne, Dr. Wolfe is about to resume practice in Glasgow, the field of his former operations, whence he had sent forth those surgical innovations on operations on the retina, conjunctival and skin translation, which have become classic, and with which his name is associated.

The name of Major F. S. Heuston, R.A.M.C., F.R.C.S., was inadvertently omitted from our list last week of members of the medical profession who were presented to his Majesty at the recent Investiture. Major Heuston, who is at present in charge of the Royal Hospital, Kilmainham, was on that occasion invested with the Order of C.M.G.

Dr. John Strachan, who has just resigned the Bishopric of Rangoon, says the *Westminster Gazette*, is one of numerous members of the medical profession who have risen to distinction in the Anglican Church, the best-known being Dr. Hicks, the Cambridge don, who became Bishop of Bloemfontein. Bishop Strachan took his M.D. degree at Edinburgh University, as gold medalist, and has had some connection with scientific education in India as a Fellow of the University of Madras.

Mr. George Brown, M.R.C.S., member of the General Medical Council, is stated to be on the point of relinquishing private practice, it being his intention to move to Cornwall. Mr. Brown has, for more years than we can remember, been a strenuous and uncompromising advocate of the rights of the general practitioner, whom he has represented as an elected representative in the General Medical Council for several years past. He is also known to the profession as for upwards of a quarter of a century the genial editor of the *Students' Journal*, since merged into the *Hospital Gazette.*

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

SCOTLAND.

[from our own correspondent.]

Royal Medical Society.—Sir John Halliday Croom, President of the Royal College of Surgeons, Edinburgh, delivered the inaugural address in connection with the opening of the 166th session of this society on October 31st. Sir Halliday Croom referred to the pride which members of the society felt in its traditions. Founded as far back as 1734, it originally consisted of six members, who met informally once a fortnight, and in 1737 it was formally constituted with a membership of ten select students who met weekly in a tavern, the election of new members requiring the unanimous consent of the society. In 1763 the meetings took place in a room in the old Royal Infirmary. It was when the society was adorned by Cullen, Gregory, Duncan, and Gilbert Blane that the suggestion was first made to build a hall of its own, and it was of interest that the first hall was erected on the site of the present College of Surgeons. This was opened in 1766; the present building in Melbourne Place had been in use exactly fifty years. Few societies had enrolled greater or nobler names in medicine than their society had—William Cullen, Joseph Black, Haller, the Monros, Mungo Park, the explorer, Sir Charles Hastings, Darwin, Sir Gilbert Blane (who in 1775 read a dissertation on "The Nature of Antiseptics, and How They Operate," thereby anticipating to some extent what was written by Lister), and, nearer our own time, Marshall Hall, Sharpey, and Carpenter. The two names that within his own time stood out as great landmarks of medicine and surgery were those of Simpson and Lister, the one by stilling pain, and the other by making the scope of surgery boundless. Those men, thanks to whom the grim terrors of surgery had disappeared, were trained in the society. In the bosom of the society had also been nurtured men who were famous in letters. Possibly Oliver Goldsmith, during the first two years he spent in Edinburgh, first got his afflatus to write "The Vicar of Wakefield" and "The Deserted Village." Probably in that old tavern in the town to which he had alluded the pompous pedant Akenside, sketched to the life in "Peregrine Pickle," got his first inklings of the "Pleasures of the Imagination"; and perhaps it was in some heated discussion in that very society that the "Origin of Species" first dawned upon Darwin. Proceeding to speak of the value of the Royal Medical Society as an adjunct to the Medical School, the speaker remarked that a lecture was often forgotten, but a subject threshed out among themselves they were not likely to let slip. They might go heedless to their examinations, but they would think twice before appearing among their fellows insufficiently prepared, or running the risk of a pleasantry at their own expense. The preparation for the battle of life lay not so much in learning professional work as in learning how to treat their fellows and their patients. Therein the society was particularly helpful, and perhaps had Mr. Rhodes seen how good a substitute it was for the much-vaunted residential system of their sister colleges in England, he might have allowed his first thoughts towards Edinburgh to take effect, and not have encumbered his alma mater with the founding of a medical school which could never be anything but second rank. The society helped its members to learn something of human nature, and many a man whose capacity was beyond dispute had failed in life for want of that knowledge. In their turn the members could do much for their society and alma mater. While in other countries University education and equipment were the care of the State, they in Scotland were in great measure left to their own resources, and were dependent for prosperity on the chance munificence of some old alumnus, some generous philanthropist, some open-handed millionaire. He hoped that in after life they would never lose an opportunity of pleading the cause of Edinburgh.

Edinburgh University General Council.—At the last half-yearly meeting of the Council, Dr. Ernest Greville moved a resolution that the right of voting by ballot be accorded to the members whenever that method was requested by the mover or seconder of a resolution. His desire was to remove one of the disabilities under which the graduates laboured. Their grievance was that they were practically denied all real representation in the councils of the University, and though they might pass resolutions unanimously the Court could ignore them. Small as their representation was, it was rendered smaller by the procedure. By voting by show of hands they advertised themselves as antagonistic to the governing few. The medical assistants were tied by the conditions of tenure of their appointments and could do nothing to improve the teaching, lest they should bring themselves into opposition with those who considered the present system perfect, and thus run the risk of losing their appointments. An amendment, substantially Dr. Greville's motion, was carried by twenty-two votes to eight for the previous question. A second motion of Dr. Greville's—That members of the General Council be allowed reasonable opportunity of ascertaining the opinions of candidates seeking election as Assessors to the University Court—was carried almost unanimously.

Edinburgh University Rectorial Election.—The result of the polling was announced shortly after noon on November 1st, the figures being:—Sir Robert Finlay, 916; Sir Edward Grey, 621—a Unionist majority of 295.

BELFAST.

[From our own Correspondent.]

Royal Constabulary Medical Officer.—The late Dr. Daniel McDonnell, having been one of the five medical officers to the police force in this city, a vacancy was caused by his death. There was a large number of applicants for the post, but as it was generally understood that it would be given to a Roman Catholic the candidates in the running were only four or five in number. Dr. W. J. Maguire has been appointed.

Belfast Workhouse.—A most amusing document has been published in the local papers—the report of a special committee of the guardians appointed to consider the report of the Local Government Board inspector. The members of the committee consider that Mr. Agnew, the inspector, has not done justice to their efforts at improving the workhouse and its management during the last three and a half years, or, as they put it, "since the good old times when the knights and squires ruled the roost, assisted by other guardians elected under a corrupt system of voting." Referring to the old arrangements, they say, "They will not harrow the public mind by attempting a description of their utter mockery." It is as well they do not, for the grammar and composition of this report is quite sufficiently harrowing to our mind. Certainly if all their claims can be substantiated the improvements in the period named have been very great—much more room, a larger medical staff, a staff of trained nurses instead of pauper attendants, strict limiting of visitors instead of indiscriminate visiting at all hours, waste checked, and order and decorum well observed. It sounds very nice, but we have our doubts. No doubt the medical and nursing staffs have been enlarged and the buildings improved, but on the day that this report was presented it was stated that two male inmates had been found drunk on the premises at 7 o'clock in the morning, having been seen sober at 3 a.m. As for waste, a letter was read from the Local Government Board on the sugar supply. The fact is not denied that over one ton and a half of refined sugar, costing £50 4s. 6d., was ordered during one half-year, though the compounder of medicines admitted that he did not use more than two shillings' worth in a year for the purpose for which it was placed on the list, namely, the compounding of medicine. The Local Government Board has accepted the visiting medical officer's repudiation of having acted with any want of bona-fides in the matter.

Small-pox Hospital at Purdysburn.—This hospital is now ready for use, and a portion of it is being furnished, including eight beds for patients and two rooms for suspected cases. The city authorities have made an arrangement with the guardians by which the latter will supply the resident staff when needed, the Corporation paying them. The remuneration will be five guineas per week for the resident medical officer, two and a half guineas per week to the senior nurse, and two guineas per week to other nurses. With regard to the remuneration of the visiting medical officer, Dr. Robb, this cannot be settled beforehand, as it will depend on the amount of work to be done, and Dr. Robb is willing to leave himself in the hands of the Public Health Committee.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

A NEW SIGN OF PARALYSIS OF THE INTESTINE.

To the Editor of "The Medical Press and Circular."

Sir,—I have read with interest, in the current issue of The Medical Press and Circular, an account of the discovery by Dr. G. Peters, of Toronto, of a hitherto undescribed physical sign—diagnostic of the condition of paralysis of the muscular coats of the intestinal wall. This new physical addition to our clinical armamentarium depends, we are told, on the existence, during the paralytic condition of the intestinal coats, "of increased telephonic properties of the inflamed abdomen." (I may remark, in passing, that the term "inflamed abdomen" is somewhat unusually comprehensive, and even postulates the existence of a state of things which has never yet been produced by disease). The special peculiarity in the new physical sign described by Dr. Peters lies, however, in the explanation offered: that "by reason of its flaccid and atonic condition, the entire intestine is, acoustically considered, a continuous column of gas, which thus acts "on the precise principle of a stethoscope,' the rigid abdominal walls acting as a sounding-board." This statement of the view of Dr. Peters involves a misappreciation of "the precise principle of a stethoscope," which, I venture to suggest, should not be allowed to go forth to the professional reading public without question. Most readers of THE MEDICAL PRESS AND CIRCULAR are, doubtless, acquainted with the history of the invention of the stethoscope, and of its introduction into clinical practice. Also, with the fact that the use of "immediate" auscultation had been reported on by the "Father of Medicine" himself; but that its application, if not left in absolute abeyance, had remained barren of definite results. Also, how one of the most inspired benefactors of suffering humanity suddenly developed the idea of the stethoscope, when consulted by a young lady whose combined stoutness and shyness precluded the practice of immediate auscultation to the infra-mammary region; which he, evidently, had been in the habit of employing in at least some cases of thoracic disease. And how, on the inspiration of the moment, recollecting how easily the scratching of a pin could be heard at the end of a long beam of timber, when the ear was applied to the other extremity, he took up a quire of paper which happened to lie on his desk, rolled it up in the form of a tube, and, on applying one end to the chest, and placing his ear in contact with the other, he was equally surprised and delighted to find how distinctly the various intra-thoracic sounds were conducted. But there are some other important facts in the physical history of the stethoscope, which seem to be less familiarly known, and which are not, so far as I can remember, duly emphasised in any of our English text-books of the "theory and practice of medicine." One of these is that, to the end of his clinical career, although like an untiring enthusiast, he tried the stethoscopic properties of almost every available form of matter, the inventor estimated the results obtainable with the original *paper* instrument almost as highly as any. Another is that, although *metals* are, as is well known to every experimentalist in the domain of acoustics, the best and purest conductors of sound, Laennec finally selected the fairly *soft and porous woods*, such as cedar, as the best materials for the clinical stethoscope, because the rather aggressive sharp *metallic tinkle* superadded a somewhat unnatural "clang-tint" to the intra-thoracic auditory phenomena. But the very important fact—and "the interpretation thereof"—which seems to be least known of all in this connection, and which I cannot at this moment remember having ever seen pointed out or explained in any of our English text-books, is: *Why Laennec always used a* HOLLOW *stethoscope.*

The late Dr. William Stokes, of Dublin, who, fortunately for himself and for the Dublin School of Medicine, happened to be a pupil of Laennec at the auspicious period which enabled him to become the young apostle of the stethoscope to the English-speaking public, used to tell at his cliniques how, when he first showed a stethoscope to a prosperous senior practitioner of the old school, the latter at once held it up to the light and —looked through it! The first impression made by the appearance of the new clinical instrument, very evidently was, that it was intended to supply some optical revelations! In the former years of my own personal experience, senior medical students have consulted me on the mysteries of the stethoscope, who laboured under the belief that the thoracic sounds were transmitted through its tubular air space. I incline to the belief that some senior practitioners still hold, somewhat indefinitely, the same opinion. In the present (more enlightened) period of quinquennial medical curricula, we must (charitably) believe that no practitioner obtains a diploma without having—long before —mastered the very elementary physical fact that sounds are transmitted along the stethoscope by the solid—not the gaseous—medium.

Of the three recognised forms of matter *gases* are, notably, the worst conductors of sound, *fluids* are less bad, and *solids* are by far the best. The first essential property of a conductor is *homogeneity*. Accordingly, the worst form of conductor available—after an approximate vacuum—is one formed of alternating layers, or spaces of matter of various composition, density, and elasticity. After prolonged and varied experimentation on the different media of which stethoscopes might be constructed, both hollow and solid, Laennec found that the various forms of vocal resonance—in health and disease—were best transmitted to the ear of the auscultator through a *tubular* stethoscope. The very important pathological acoustic signs of *bronchophony*, *pectoriloquy*, and *ægophony* would be satisfactorily recognised only by the use of an instrument of this construction. In few words, the tubular stethoscope functions as a *speaking tube*, as well as an ordinary conductor of acoustic waves, by preventing the dispersion of the energy of the vocal vibrations in every circumferential direction. The utilisation of the acoustic theory of the stethoscope was completely carried out by the late accomplished Dublin physician, Dr. Haydon, of the Mater Misericordiæ Hospital, who constructed his own form of the instrument of a single perforated piece of wood—thus giving the ideal combination of the continuous *solid conductor* and the *speaking-tube*—fairly widened at the distal end for application to the ear. And this construction of the instrument was still further improved by his colleague, Sir Francis Cruise, one of the most accomplished of living physicians, who, by the addition of a conveniently broad "removable" ear-piece to a fairly expanded aural extremity, gave the utmost available area of contact with the prominences of the auricle—combined with the desirable facility of conveyance in the pocket of the practitioner.

The comment on the "*discovery*" of Dr. Peters, which elicited these remarks, leaves the impression, on my mind at least, that the essential conductor in stethoscopic observation is the imprisoned column of air—which notion is *not* in accordance with physical facts, nor with the teachings of the inventor of the stethoscope, nor of his enlightened successors and representatives.

I am, Sir, yours truly,
JOHN KNOTT, M.D.

34, York Street, Dublin, November 1st, 1902.

Literature.

TEXT-BOOK OF ANATOMY. (a)

THOSE who have looked forward to the publication of this important work have been afforded a rare treat by its perusal. We may say at once, that it undoubtedly marks a great advance in the teaching of anatomy. One is sometimes tempted to think that with such a multitude of text-books on such a subject as anatomy there can be no room for new ones, yet the study of a book like this will convince the most sceptical that there was ample room for it. The book is dedicated to Sir Wm. Turner. No fewer than nine British anatomists, holding high positions in different teaching centres, have been associated with the Editor in contributing the various articles. They are all, with one exception, "sons" of Sir Wm. Turner and the Edinburgh School, and the remaining one may be regarded as a legitimate and worthy grandson. The Editor is the largest individual contributor. He has furnished articles on the brain and spinal cord (195 pages), and also those on the respiratory system and the ductless glands. They are all stamped with the accuracy and elaborateness of detail which one would expect who is familiar with the writings of this great master of descriptive anatomy. The many clear and carefully-selected diagrams in the first of these articles will prove of the greatest assistance to students in their efforts to overcome the difficulties of this important part of the subject. We notice that the Editor makes practically no use of colours in any of the many illustrations which adorn his text, and we think that in this he has exercised a wise discretion. It is impossible in a short review of such a great work as this is to do more than briefly notice a few of the points which struck us as we looked through its pages. There is a wonderful harmony between the various sections, even the styles in which they are written present no abrupt contrasts. The development of most of the bones is illustrated in an attractive and striking manner by the use of tasteful colours; curiously, one of the bones in the description of which we notice this method is not applied is the temporal, whose intricacies of development most puzzles the average student. We are glad to see that the subject of the architecture of bones has been systematically dealt with, it seems a pity, however, that some illustrations of these in which the arrangement is recognised as of great practical importance have not been included, and some reference made to the subject in the article on surgical anatomy. We notice that on the subject of the motor and sensory distribution of the spinal nerves, Professor Paterson appears to hold widely different opinions from Kocher, with whom Thorburn (in 1899) has in the main expressed agreement. The organs of special sense have been most clearly and judiciously described by Professor Howden: nothing important has been omitted, and a careful preservation of perspective has been observed. The greatest care has been taken in the article on the vascular system by Professors Young and Robinson in that most difficult subject of the development of the blood vascular system to make the descriptions clear by the use of an ingenious system of coloured diagrams. Probably greater divergence of opinion will be expressed in connection with Professor Birmingham's article on the digestive system than with any other part of the book. A relatively wide range must be allowed in laying down the positions of the viscera of the abdominal cavity, and the topographical anatomy is rendered thereby all the more difficult to describe. Professor Birmingham has, in our opinion, succeeded admirably. The mid-Poupart lines have disappeared in the description of the regions of the abdomen, and their places are taken by the Poupart lines drawn vertically upwards from a point midway between the anterior superior spine of the ilium and the symphysis pubis. It seems a pity that illustrations should have been taken from a subject in which it is admitted the liver and cæcum extended lower down than normal. Some notable discrepancies appear between the illustrations in this section and those in the article on surface and surgical anatomy. To the anatomist they are in themselves interesting as showing how variable may be the conditions found without the variations amounting to what need be called pathological; the student, we trust, may learn the same lesson and not be dismayed. The only portion of the book which appears to suffer from compression apart from that devoted to surgical anatomy, in which case it was from the nature and extent of the subject necessary, is that on the urogenital system by Professor Dixon. Possibly the student will think there is enough and to spare provided for his digestion, yet, comparing this subject with others, the subject might well have occupied at least twenty more pages. The constitution of the "middle" lobe of the prostate is clearly described in the text, yet each illustration of the parts seen on the mesial section of the pelvis with its contents, shows equally clearly a division between this portion of the prostate and the lateral portions, which division should admittedly only show in the lines of the common ejaculatory ducts.

(a) "Text-Book of Anatomy." Edited by D. J. Cunningham, M.D., F.R.S., Professor of Anatomy and Chirurgery, Trinity College, Dublin. In One Volume, royal 8vo, extra cloth. Pp. xxxii., 1,309, with 824 Engravings. The articles are contributed by Professor A. H. Young (Manchester), Professor Arthur Thomson (Oxford), Dr. D. H. Hepburn and Dr. Harold Stiles (Edinburgh), Professor A. M. Paterson (Liverpool), Professor R Howden (Newcastle), Professor A. Birmingham (Dublin), Professor A. F. Dixon (Cardiff), and the Editor. Edinburgh and London: Young J. Pentland.

The indexing has been very satisfactorily done by Dr. S. W. P. Lawrence. It would, however, be an improvement if, where several references to pages appear after a title in the index, the number of the page bearing the major reference were printed in heavier type. This plan renders the work of looking up subjects much lighter. We think a great addition to the usefulness of the book might be made by the insertion of a section dealing with the study of anatomy as it is learned and taught in the dissecting-room. It is true there are already books provided for the special purpose of assisting the student in this part of his work, but there are also excellent books devoted to the study of applied anatomy, and yet this is not held to obviate the necessity for a section of seventy-five pages on surface and surgical anatomy, with several full page illustrations in Professor Cunningham's book. It can scarcely be contended that this important subject of surgical anatomy, though exceedingly well introduced, is anything like exhausted by Mr. Harold Stiles. Nor do we think the section we contemplate on the subject of anatomy as it is taught in the dissecting room need be xhaustive.

eThe general tendency on the part of students is to depend too much on their books on "Practical Anatomy"; some never open any chapter of a systematic anatomy except the one on osteology, the result being that many never get a connected view of the subject, which remains for ever for them a disjointed collection of "parts." The inclusion of such a chapter should be comparatively easy seeing that the arrangements for dissections in most schools in Great Britain are at present adopted from those of Edinburgh, and therefore fairly uniform.

This latest addition to the long list of text-books of anatomy is profusely illustrated. Mr. Murray's work shows the highest skill in emphasising the points desired to be made in each illustration, while the accessory portions are worked up with every attention to accuracy of detail. The less highly coloured illustrations in the chapter on surface anatomy, for instance, are artistic gems. The Editor in his preface pays a well deserved tribute to the ability of Mr. Murray, who has drawn all the illustrations except those in two of the articles. The engraving must be held responsible for a certain amount of unevenness in the quality of different pictures in the same sections. A very successful future is guaranteed for this text-book, which will immediately take its place as one of the leading works on anatomy in the English language.

HAIG ON FOOD AND DIET. (*a*)

Though the reader may not be prepared to accept as physiological truth all that is stated in this interesting book, yet there can be left little doubt of the author's sincerity. Dr. Haig writes as one thoroughly convinced in his own mind, and this cannot fail to impress those who may seek his advice. The statement in the preface that ignorance in matters of diet is the cause of a hideous waste of time and money, as well as of mental and moral obliquities, naturally leads the reader eagerly to see how these terrible evils may be averted by a reformed system of diet.

The tables of tracings show how, as fresh albumens are introduced into the blood available for production of force, up goes the urea curve with corresponding increase in the power of producing force.

The sources whence the nutritive albumen are to be derived is the great point. Beef tea and meat extracts are termed "deadly decoctions of flesh." They abound in uric acid and act but as transient stimulants, as also do tea, coffee, and cocoa. What, then, is the patient to live upon? Milk, cheese, nuts, almonds, and various bread-stuffs are to take the place of flesh food, and in support of this vegetarian diet the author quotes the walking match from Dresden to Berlin in May, 1902.

(*a*) "Diet and Food, Considered in Relation to Strength and Power of Endurance, Training and Athletics." By Alexander Haig, M.A., M.D.Oxon., F.R.C.P. Fourth Edition. London: J. and A. Churchill. 1902.

Six vegetarians came in in front and gained an easy victory over the flesh-eaters.

The author's own personal experience shows how much good he has derived from his very simple diet. We believe the truth to be that there are many persons who would derive immense benefit from giving up meat and alcohol, while undoubtedly there is another class who suffer from amylaceous dyspepsia who become changed for the better in a remarkable way when living on rarely-cooked meat, with toast and hot water for drink.

Dr. Haig's book, at any rate, furnishes much valuable food for both physiologist, physician, and chemist, and is very well worth careful study.

BLUMFELD ON ANÆSTHETICS. (*a*)

We congratulate the author on producing the best handbook on Anæsthetics that has yet appeared. It is practical and didactic, the accepted theories of the London school are put before the student, and he is not bothered with conflicting theories. We are particularly pleased with Chapter IV., treating of the administration of chloroform; if its directions are strictly followed we shall less frequently see the heading, "Death under Chloroform." We are not to be taken as approving of everything the author teaches; we differ widely from him on the relative merits of ether and chloroform, but withal we think that for those who accept the opinion of London anæsthetists the book is as near perfection as a practical handbook on the subject can be.

THE COMBAT WITH CONSUMPTION. (*b*)

Last year's British Congress on Tuberculosis was epoch marking. It fixed a milestone in the uphill journey of the race. It aroused a new spirit, and lent energy to many efforts making for the uplifting of the human. Men of all nations gathered at the review, at which weapons were examined and methods of campaign discussed whereby a successful warfare might be waged with the "great white plague." Now, within a year of the Congress, we are favoured with the bulky but exceedingly valuable "Transactions" of the great gathering. They appear in four volumes. The second deals with the work conducted in the State Section, and the fourth with the consideration of the Veterinary Section.

Medical men will find their chief interest in volume three. Here the report of the Medical Section is found edited by Dr. Hector Mackenzie and Sir Hugh R. Beevor; and here also is the record of the work of the Pathological Section, edited by Dr. J. J. Perkins. The volume teems with material rich in facts and abounding with suggestions. It contains the detailed reports of valuable discussions on climatology, the therapeutic and diagnostic value of tuberculin in human tuberculosis, sanatorium treatment, the use of the Röntgen rays, the relations of the bacillus tuberculosis, the conveyance of tuberculosis by milk, the varieties of tuberculosis, and mixed infections.

The various papers presented to the Congress are here given in full, but among so many of exceptional interest and value it is impossible to single out particular articles for praise.

These volumes will long remain as worthy monuments marking a combined and concentrated effort to secure means for the extermination of a scourge which bars human progress. Everyone in any way concerned in the publication of these records merits high praise, and we particularly congratulate the Honorary Secretary-General and his staff of workers on the way in which they have upheld the dignity and influence of British medicine, and manifested to the whole world the scientific spirit and keen humanitarian instincts which stimulate workers in this country.

THE EXAMINATION OF THE BLOOD. (*a*)

During recent years hæmatology has proved a particularly fascinating field for enthusiastic investigators. Systematic examination of the blood has thrown much light on many problems connected with hæmopathology. Modern methods have greatly facilitated research, and clinical accuracy has been brought nearer. Not only have greater powers been secured for diagnosis, but in not a few diseases useful guides to prognosis have been discovered. Among the many valuable works dealing with affections of the blood and methods for their investigation, which have appeared during the last few years that of Dr. Coles justly occupies a prominent place, and the fact that a second edition is now called for affords evidence of its usefulness.

The work makes no claim to originality but is a judiciously arranged and thoroughly trustworthy compilation of much of the best literature of the subject. Dr. Coles, however, has devoted much attention to the technique of the subject, and one cannot but regret that he has refrained to a great extent from expressing his own views. The book is peculiarly suited to the needs of the practitioner or the student seriously entering on the study of hæmatology. The practical methods are well presented and the clinical deductions obtained from the examination of the blood clearly expressed. The book has been thoroughly revised and much new matter added, particularly on recent methods for the detection of malarial and filarial parasites. Dr. Coles still advocates the use of slides rather than cover glasses in the preparation of blood films. He also prefers the eosin and hæmatoxylene method of staining, but gives particulars concerning the very satisfactory eosin-methylene-blue stains introduced by Jenner and Leishman.

The sections on the general morphology of the blood are particularly deserving of commendation. It is, however, unfortunate that the descriptions of the very excellent plates should have been placed after the table of contents, and not, as should have been the case, in close proximity to the figures. The description of the blood in various diseases is on the whole satisfactory, although the discussion of the pathology of certain of the blood diseases is meagre. We venture to think Dr. Coles does not present sufficient evidence to support his contention that chlorosis occurs "in boys in a somewhat modified form." We are sorry to find no reference to Tallquist's very convenient and clinically useful hæmoglobin scale. Exception, we think, may be taken to a group of "simple primary anæmia" with anything like uniform pathology. We could have wished that Dr. Coles had more clearly indicated the reasons which lead many to consider spleno-medullary leucocythæmia and lymphæmia absolutely distinct affections, and not merely two "forms" of the one disease. A differential chart indicating the chief characters of the more important forms of anæmia should prove of much service for ready reference. The section on the blood in malaria will also prove of considerable clinical service.

A short bibliography is given, but a little care would have much increased its value. But in spite of limitations and manifest shortcomings the book is a notable one, and admirably meets the needs of those for whom it was written.

HEWLETT ON BACTERIOLOGY. (*b*)

The first edition of Professor Hewlett's work on bacteriology was so well known and so much appreciated that it is no wonder that within a comparatively short time a second edition has been called for. In this new edition, the text has been carefully revised throughout,

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(*a*) "Anæsthetics; a Practical Handbook." By J. Blumfeld, M.D.Cantab., Assistant Anæsthetist to St. George's Hospital; Anæsthetist to the Grosvenor Hospital for Women and Children, London. London: Baillière, Tindall and Cox. Pp. 109. Price 2s. 6d. 1902.

(*b*) "Transactions of the British Congress on Tuberculosis for the Prevention of Consumption." In Four Volumes. London: William Clowes and Son, Limited 1902.

(*a*) "The Blood: How to Examine and Diagnose its Diseases." By Alfred C. Coles, M.D., B.Sc. Second Edition. Pp. 286. With six coloured plates. London: J. and A. Churchill. 1902. Price 10s. 6d.

(*b*) "A Manual of Bacteriology, Clinical and Applied, with an Appendix on Bacterial Remedies, &c." By Richard T. Hewlett, M.D., M.R.C.P., D.P.H., Professor of General Pathology and Bacteriology, King's College Hospital; Physician to the Seamen's Hospital, Greenwich, &c. Second Edition. Pp. xiii. and 535. With numerous Plates and Illustrations. London: J. and A. Churchill. 1902.

several sections have been re-written, and the whole work brought up to date. The volume still maintains its handy form, and will not only maintain but increase its former reputation.

The chapter on suppuration and septic conditions is particularly good, and contains a clear and practical description of the method of procedure which should be adopted in determining the nature of the infecting bacteria in pus and other discharges. Professor Hewlett draws attention to the importance of cultivation experiments in making a diagnosis of the presence or absence of gonococcus, as by this means alone is it possible to distinguish it from the *diplococcus intracellularis meningitidis* of Weichselbaum.

We should like to make one suggestion, which may or may not be considered of value. Micro-photographs are excellent means of reproducing microscopical specimens for the benefit of those who are familiar with the appearances of the specimens thus reproduced, but they are not sufficiently clear to afford one-half the instruction to students that a good diagram will afford. If, however, a clearly-drawn diagram of each micro-photograph was placed beside the latter, the advantage to the student would be very great, as he would be then furnished with a much-needed key to the photograph, and so be able to determine more exactly the nature of the different structures which he sees.

NEW BOOKS AND NEW EDITIONS.

The following have been received since the publication of our last list:—

Bailliere, Tindall and Cox (London).

Text-book of Diseases of the Ear and Adjacent Organs. By Professor Dr. Adam Politzer, of Vienna. Translated under the Author's supervision by Milton J. Ballin, Ph.D., M.D., and Clarence L. Heller, M.D. Fourth Edition. Revised, with 343 original illustrations. Pp. 900. Price 25s.

Anæsthetics: a Practical Handbook. Vol. VII. of the Medical Monograph Series. By J. Blumfeld, M.D.Cantab. Pp. 109. Price 2s. 6d.

The Theory and Practice of Infant Feeding, with Notes on Development. By Henry Dwight Chapin, A.M., M.D. With numerous illustrations. Pp. 326. Price 10s. 6d., net.

John Bale, Sons and Danielsson, Ltd. (London).

Spring Catarrh of the Eyes. By H. Danvers, M D. Illustrated, with Three Plates. Pp. 60. Price 4s. net.

J. and A. Churchill (London).

Obstinate Hiccough. By L. F. B. Knuthsen, M.D.Edin. Pp. 169. Price 6s.

Eyre and Spottiswoode (London).

Reports and Papers on Bubonic Plague. By Dr. R. Bruce Low. With Introduction by the Medical Officer of the Local Government Board. Pp. 416. Price 4s. 1d.

Charles Griffin and Co., Ltd. (London).

The Work of the Digestive Glands. Lectures by Prof. J. P. Pawlow. Translated by W. H. Thompson, M.D., M.Ch., F.R.C.S.Eng. Illustrated. Pp. 196. Price 6s. net.

Adden, Best and Co. (London).

Hadden's Pocket Vocabulary of Medical Terms. By Henry Payne, M.D., &c. Third Edition. Revised and enlarged by Philip Cowen, M.D., and Herbert Davey, of the Middle Temple. Pp. 144.

H. K. Lewis (London).

Cancer of the Uterus. By Arthur H. N. Lewers, M.D.Lond., F.R C.P.Lond. With fifty-one Original Illustrations and three Coloured Plates. Pp. 328. Price 10s 6d. net.

Handbook of Surface Anatomy and Landmarks. By Bertram C. A. Windle, F.R.S., Sc.D., M.D., M.A. Third Edition. Pp. 141. Price 4s. net.

J B. Lippincott (Philadelphia and London).

A Text-book of the Science and Art of Obstetrics. By H.y J. Garrigues, A.M., M.B. With 504 Illustrations. Pp. 884. Price 25s.

Grant Richards (London).

Scientific Phrenology. By Bernard Hollander, M.D. With over 100 Illustrations. Pp. 307. Price 6s.

Elliot Stock (London).

Natural Food. By J. P. Sandlands, M.A., T.C.D., Vicar of Brigstock. Pp. 91. Price 1s.

Taylor and Francis (London).

Calendar of the Royal College of Surgeons of England. Pp. 332. Price 1s.

The death is announced of Mr. Edwin Haward, F.R.C.S., formerly of the Army Medical Service, in which capacity he went through the Crimean War and served at the base hospital at Scutari with Miss Florence Nightingale. He was in his 87th year.

Laboratory Notes.

BYNO-CASCADA.

Byno-cascada is the name given by Messrs. Allen and Hanbury to a combination of Bynin with Rhamnus purshiana and Rhamnus frangula. The bitter taste of the drug is masked by the vehicle without its having been necessary to tamper in any way with its composition, as in the so-called "tasteless" preparations of cascara. The addition of Rhamnus frangula is useful in that it tends to check the establishment of tolerance in respect of the laxative action. Moreover, the digestive and nutritive properties of Bynin are none the less valuable in this connection, and the combination represents a happy blend of digestive and laxative properties.

CADBURY'S MILK CHOCOLATE.

A combination of pure cocoa with the nutritive principles of milk furnishes an ideal food, and in the form in which it is presented by Messrs. Cadbury it is additionally attractive by reason of the perfection of preparation and delicate flavour of the product.

In this "milk chocolate" much of the cocoa butter is replaced by the more readily assimilable milk fat, and milk sugar (lactose) partly takes the place of ordinary cane sugar, thus avoiding the unduly sweet taste which would result from too large a proportion of the latter. The comparative non-liability of the former to undergo fermentative changes is another advantage attending the introduction of milk sugar.

The "milk chocolate," although it contains a very low percentage of moisture and is practically unalterable in any climate, does not give rise to the thirst which follows the ingestion of mixtures of cocoa and sugar. It is, moreover, an extremely nourishing and sustaining article of food which might well form part of "emergency rations."

PURGATIN.

We have received from Messrs. Knoll, Limited, samples of a new synthetical product possessed of laxative properties, to which (in accordance with an objectionable practice) the name of "Purgatin" has been given. It is derived from the oxyanthraquinones, the class of bodies to which belong the active constituents of cascara, rhubarb, senna, and other mild purgatives.

Its laxative action is mild or strong according to the dose employed. In five to ten grain doses the action is quite mild, whereas in doses of from twenty to thirty grains it is a drastic purgative. The best way to give the drug is in the form of tablets containing five grains, mixed with chocolate. It is tasteless, and gives rise to no colic or other inconvenient effect.

On general principles it is always preferable to make use of a definite chemical compound, and from this point of view, Purgatin, being an uniform crystalline substance, presents certain advantages.

It is important to note that it escapes in the urine in the form of anthrapurpurin, which gives a red colour to the urine, a point of which the patient should be informed beforehand.

TRIFERRIN.

This organic ferruginous salt, manufactured by the same firm, is a paranucleate of iron. It contains 22 per cent. of iron and 2·5 per cent. of organically-united phosphorus. It may reasonably be anticipated that iron and phosphorus in this organic combination are more readily assimilated than the inorganic salts still so largely used, and this assumption has been borne out by actual observation. The therapeutical effects of any ferruginous medication depend, of course, not so much on the quantity of iron administered as upon the proportion which undergoes absorption. From this point of view the therapeutical value of Triferrin is greatly in excess of all inorganic salts of iron. The dose is five grains, repeated several times a day, and it is put up in tablets mixed with chocolate for facility of administration.

The Earl of Dysart has contributed £100 to the funds of the National Anti-Vaccination League—a proof that inability to grasp the meaning of facts and figures is not confined to the uneducated classes.

Medical News.

Italian Trade Mark Infringers Punished.

We have received from Messrs. Burroughs Wellcome and Co. copies of the *jugements motivés* rendered in their favour in actions brought by them against several pharmaceutical firms in Italy for fraudulent use of their trade mark "Tabloid" and for imitation of their goods in such wise as to deceive the unwary customer. Imitation has been asserted to be the sincerest form of flattery, but when advantage is taken of such means to obtain the benefit of a popularity so painstakingly obtained and so deservedly retained by Messrs. Burroughs Wellcome and Co. it is a matter for satisfaction that the strong hand of the law should have been invoked to put a stop thereto. The lesson, no doubt, will not be thrown away, although it is not every firm which is prepared to enter upon prolonged and costly litigation to enforce its rights. We congratulate this enterprising firm on the fact that the appeals have been dismissed and the original verdict of the Milan Tribunal confirmed.

The Royal Academy of Medicine.

At the annual general meeting of the Royal Academy of Medicine last week the following officers were appointed:—President: Lombe Atthill. General Secretary: John B. Story. Secretary for Foreign Correspondence: Sir J. W. Moore. Medical Section—President: A. V. Macan. Council: J. B. Coleman, James Craig, W. R. Dawson, H. C. Drury, R. A. Hayes, T. P Kirkpatrick, J. Lumsden, J. O'Carroll, G. Peacocke, R. Travers Smith. Surgical Section—President: Lambert H. Ormsby. Council: Arthur Chance, J. P. Doyle, F. Conway Dwyer, G. Jameson Johnston. John Lentaigne, R. C. B. Maunsell, H. R. Swanzy, E. H. Taylor, W Taylor, R H. Woods. Obstetrical Section—President: W. J. Smyly. Council: Paul Carlton, R. H. Fleming, R. A. Flynn, J. H. Glenn, A. J. Horne, H. Jellett, J. L. Lane, A. J. Smith, E. Hastings Tweedy, T. H. Wilson. Pathological Section: President: E. J. M'Weeney. Council: A. H. Benson, J. B. Coleman, F. C. Crawley, H. E. Earl, J. O'Carroll, A. C. O'Sullivan, A. R. Parsons, J. A. Scott, F. C. Purser, A H. White. Section of Anatomy and Physiology—President: D. J. Cunningham. Council: A. Birmingham, D. J. Coffey, A. Fraser, E. H. Taylor, W. Taylor, W. H. Thompson. Section of State Medicine—President: Ninian Falkiner. Council: Sir C. Cameron, C.B., W. R. Dawson, F. C. Martley, Sir J. W. Moore, J. M. Redmond, W. A. Winter.

Testimonial to Dr. R. S. Allen.

Dr. R. S. Allen, of Belper, who was recently mulcted in £100 damages as the result of an action for libel brought against him by a former matron of the Belper Isolation Hospital, which, with costs, involved the loss of £600, was presented last week with a cheque for £200, contributed by friends, neighbours, and fellow-practitioners, as a tangible proof of sympathy with him under the trying circumstances.

Plague at San Francisco.

It is reported that bubonic plague is very prevalent in California, over 2,000 deaths having occurred since February in San Francisco alone The reports are somewhat conflicting, and it is difficult to avoid the suspicion that the real facts of the case are being kept from the public.

Death of Professor Eugen Hahn.

The death is announced of Professor Eugen Hahn, Chief of the Imperial Department of the Berlin Municipal Hospital at Friedrichshain. The deceased professor was one of the first surgeons to perform the operation for the radical cure of cancer of the larynx, and he also did much to advance the *technique* of operation on the intestines. He was born in 1841.

Cholera in Palestine.

Cholera has spread from Egypt into Palestine where it has already claimed about 500 victims, all natives. Railway traffic between Jerusalem and Jaffa has been arrested. There is a great lack of medical assistance, and, owing to the panic, even the necessaries of life are running short.

Small-pox in London.

Six fresh cases have been admitted to the hospitals of the Metropolitan Asylums Board during the fortnight ending on Thursday last. The total number of patients now under treatment is 24. At the corresponding date last year there were 258 small-pox patients under treatment.

Birmingham University Students Agitate.

The Students' Representative Council was re-elected last week, and a vigorous and wordy campaign was carried on, prior to the election, in favour of sending to the Council men pledged to repudiate the "grandmotherly legislation" which regulated indulgence in tobacco and prescribed "home work" as a remedy for idleness. The "opposition six" were duly elected, and the greatest excitement prevailed among the general body of students, who are unanimously in favour of the abolition of the Discipline Committee. An allocation in favour of order and attention to study delivered by the Colonial Secretary before he leaves for South Africa would perhaps assist the authorities in restraining these exuberant youths!

Irish Medical Schools' and Graduates' Association.

The autumn general meeting of the Association will be held at the Hotel Cecil, on Wednesday, November 26th, at 6.30 p.m. On the same evening the Association will dine in the Grand Hall of the Hotel Cecil at 7.15 p.m., when the chair will be taken by the President, Sir Philip Crampton-Smyly, M.D., F.R.C.S.I., Honorary Surgeon to the King. The Association will have the honour of entertaining the Commander-in-Chief, Field-Marshal the Right Honourable Earl Roberts, V.C., K.G., K.P., G.C.B., G.C.S.I., G.C.I.E., Countess Roberts, and their daughters.

Duke of York's School.

It has been decided that the appointment of medical officer of the Duke of York's School shall be converted into a post for an officer of the Royal Army Medical Corps on full pay, and Major J. C. Morgan, of that corps, will complete a term of three years in the appointment dating from January 1, 1901.

A Year's Bacteriological Work in India.

The report of the Imperial Bacteriologist for the past official year describes the chief work of the department for the year as the testing and production of rinderpest serum. The experiments were directed to improving its protective quality and perfecting the process of manufacture. The results obtained at Jacobabad, Madras, and Rangoon showed that the initial protective value of sera is materially diminished by exposure to high temperatures. Experiments have also been carried out in different localities to ascertain the strength of the doses required to secure protection in different breeds of cattle. Dr. Lingard is desired to prepare a special report on the results of his investigation into the best methods of obtaining a serum. The experiments as to anthrax are said to have been brought to a successful issue by the discovery of a protective serum, and researches were prosecuted into other animal diseases. There is an increasing demand for serum, the doses issued last year being very nearly double the number of those of the preceding one. A scheme recently sanctioned for enlarging the laboratory will, it is hoped, lead to the production of 100,000 doses of the serum per annum, while the plan for training veterinary assistants at the laboratory in the inoculation of cattle against rinderpest has been successful. It has been decided to discontinue the issue of fungus tubes for exterminating locusts, the results not having been successful in any of the provinces, and meanwhile investigations and experiments on the subject will be conducted in the Agricultural Department as well as by the bacteriologist.

A Medical Co-respondent.

Mr. Richard H. Darwent, L.R.C.P., L.R.C.S.Ed., of Hull, was one of the co-respondents in a suit for divorce brought by a local solicitor, and as no defence was offered a decree *nisi* was granted in favour of the petitioner. As the lady was a patient of Mr. Darwent's the matter will probably turn up again before another tribunal.

Nurse versus Doctor.

The action brought against Dr. Henry Vivian Bertram by Mrs. Margaret Ellen Ingle, a professional nurse, for alleged libel, has been settled without calling upon the jury for a verdict, one of them having disappeared as the result of the negotiations. The action arose from the defendant having remarked in a letter that the nurse had been guilty of violent treatment of her patient. This statement must be taken to have been without any foundation in fact, since the defendant agreed to withdraw the imputation. It were better for him that it had never been made.

No Substitutes.

A lady doctor at Battersea was recently directed by the coroner to carry out the post-mortem examination, but, diffident as to her ability to do the work satisfactorily, or unwilling to contaminate her hands with so foul a task, she called to her assistance a lady pathologist, an arrangement to which the coroner took exception, observing that he could only pay one fee, and he expected the examination to be made by the person to whom his order was addressed. With a little management the difficulty need never have arisen. Making an autopsy does not necessarily mean that the mechanical part of the work must be done by the witness. It is sufficient that he, or she, shall be in a position to testify to the facts of the case which, as an onlooker, he or she, would be quite in a position to do.

Death under Chloroform.

A man, aged 44, died under chloroform at Dr. Anderson's surgical hospital, Nottingham, when about to undergo an operation for the removal of an epitheliomatous growth of the lip. There was a good deal of excitement, the patient being extremely apprehensive of the anæsthetic, and, soon after, the breathing ceased. The usual verdict was returned.

Death from Septic Poisoning.

Mr. Roger Hughes Jones, M.R.C.S., L.R.C.P., of Penryn, Cornwall, scratched his hand when preparing a splint for an injured patient, and the wound became infected while attending to another patient suffering from erysipelas. He was thought to be convalescent, when he suddenly became collapsed and died. He was 47 years of age and had been ten years in practice at Penryn.

Heavy Sentence on the Bogus Doctor.

Mr. Herring, *alias* Hoffmeister, the brazen-faced rogue who audaciously assumed names and titles to which he had no right, and who by practising thereon contributed to the death of one of his patients, was tried for manslaughter at the Old Bailey last week, and was sentenced to five years' penal servitude. This is refreshing after the indulgence which, for some inscrutable reason, it is the custom to display towards this class of offender by magistrates and judges. This may *encourager les autres*.

Pass Lists.

Royal College of Physicians of Edinburgh Royal College of Surgeons of Edinburgh, and Faculty of Physicians and Surgeons of Glasgow.

The quarterly examinations of the above Board, held in Edinburgh, were concluded on the 30th ult., with the following results:—

First Examination, Four Years' Course.—Frederick Francis Middleweek passed the examination.

First Examination, Five Years' Course.—Of twenty-one candidates entered the following nine passed the examination: Archibald Randolph Fulton Douglas, John Peter Carroll, William Martin Ferguson, Henry James Gorrie, John Hugh Simpson, Thomas Boston Johnstone, William Church Mann, William Alexander Huston, Louis Nathaniel Robertson, and two passed in Elementary Biology and four in Chemistry.

Second Examination, Four Years' Course.—Of seven candidates entered the following five passed the examination: William Henry Curtis, William Hall, Randal Herley, A. M. S. Kelso, and William James Coppinger.

Second Examination, Five Years' Course.—Of twenty-five candidates entered the following ten passed the examination John William Pell, James Baillie, Archibald Cameron Ney, Henley John Byrne, James Taylor (with distinction), Claude Knight-Kennedy, William John Cogan, James Murphy, Reginalds Reynalds, John L. Power, and one in Anatomy and one in Physiology.

Third Examination, Five Years' Course.—Of twenty-eight candidates entered the following fifteen passed the examination: Evelyn Neville Lea Wilson, George Harrison, William Adams, John Arthur Denzil Rome, David Arnold Hastings, Evelyn Morris Franklin, Percy James Thomson, L.D.S., Dowlatram Gopaldas Advani, Vincent Paul Pereira, Stephen McCarthy, David Haig, William Millar Ramsay, Emile Reboul, Dora Mann, Margaret Lucy Tyler, and three in Materia Medica.

Final Examination.—Of eight candidates entered the following thirty-three passed the examination, and were admitted L.R.C.P.E., L.R.C.S.E., and L.F.P. and S.G.: Ernest Joseph Addison, Milson Russen Rhodes, Anne Low Venters, Lilian Gertrude Simpson, Benjamin Isaac, Mary Edith Martin, Katharine Charis Davies, William Eugene Struthers, Hans Martinus Peries, Ethelbert Hearn, Andrew Paterson Walker, Trueman Edward Bishop, George Henry Wilkinson, Timothy Foley, Christopher Marley Cass, Charles Wilfred Coghlan, Elizabeth Mary Cardoze. Frederick Arnold Ritchie, Isa Charan, Nalini Nath Dey, Joseph Albertus Exton, Francis Audubon Gray, Robert Sutherland Mackintosh, Ryder Percival Nash, Kaikhushru Jehangir Bhamgara, Robert Gibson, Kottarathil Matthan Matthan, Andrew Smyth, John Coulter Warwick, James Macarthur, David Ahern, Lionel George Wickham, Norman Pigott Fairfax, and four passed in Medicine and Therapeutics, one in Surgery and Surgical Anatomy, twelve in Midwifery, and nine in Medical Jurisprudence.

The following gentlemen, having passed the requisite examinations, received the Diploma in Public Health of the above Board:—Thomas Lander Thomson, George Archibald Park Ross, Harry Moss Traquair, Charles William Somerville, Richard Hamilton, William John Barclay, Robert Paterson Heddle, Robert Brown Turnbull, and David Durran.

Royal College of Surgeons of Edinburgh.

At a meeting of the College held on Oct. 15th last, the following gentlemen, having passed the requisite examinations, were admitted Fellows of the College:—William Sloss, M.B., James Simpson Clayton, M.D., John Adamson Honey Duncan, M.D., Alexander Henry Edwards, David Gault, M.D., Robert George Henderson, M.B., William Edward Herbert, M.B., Harold Crossley Hildreth, L.R.C.S.E., Henry Cairns Lloyd, M.B., William Chisholm Macdonald, M.B., Alexander Morrison McIntosh, M.B., Arthur Augustus Pim, L.R.C.S.E., Robert George Riddell, M.B., Neil Robson, M.B., John Stuart Ross, M.B.

The Bathgate Prize, consisting of medal and medical books, founded by Colonel William Lorimer Bathgate, in memory of his late father, William McPhune Bathgate, F.R.C.S.E., Lecturer on Materia Medica in the Extra-academical School, for competition among students attending the extra-mural classes in Materia Medica, was awarded for the summer session to Mr. John Macmillan Campbell, 16, Scotland Street, Edinburgh.

University of Durham.

At the convocation holden on Tuesday, Oct. 21st, the following degrees were conferred, viz.:—Doctor in Medicine (for practitioners of fifteen years' standing): George Graham Hodgson, M.R.C.S., L.R.C.P., John Goodwin Shea, L.R.C.P., L.M, F.R.S.I, D.P.H. Bachelor in Medicine (M.B.): David Rees Roberts.

Conjoint Examinations in Ireland.

Second Professional (Part II.). Third Professional Examinations.—Candidates have passed these examinations as undernoted:—Second Professional (Part II.)—J. R. P. Allin, T. S. Blackwell, S. Close, G. H. Gallagher, W. Kelly, C. W. O'Keette, W. Sheahan.

Third Professional.—A. Four years.—G. T. O'Kelly.

B. Five years. Old Regulations.—W. H. Anderson, W. Cremin, M. Deeny, J. P. Falls, A. E. F. Hastings, T. J. Lloyd, F. J. Moore, J. J. McCounell, P. J. O'Farrell, W. Ormsby, C. F. P. Plunkett, M. C. Sage.

C. New Regulations.—F. W. Brunker, F. X. Costello, R. G. Griffin, P. Sampson.

Notices to Correspondents, Short Letters, &c

☛ **Correspondents** requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

Mr. R. H.—The names of the Editorial Staff are not given to any but members of the profession, and then only for some very special reason.

Dr. S. E H.—The editor and translator of Professor Brouardel's work on "Death, and Sudden" is at present in Australia. A letter would find him at Semaphore, South Australia.

Dr. N. K.—You have omitted one very important item in your communication on which the point mainly rests. Please supply this, as we cannot venture on an expression of opinion.

AN INGENIOUS ADVERTISEMENT.

At the recent Grocery Exhibition the firm of Henri Nestlé attracted a good deal of interest by their exhibit of a Swiss chalet, the exact type of those with which travellers are familiar in the mountain pastures. The chalet was "furnished" with the requisite implements, not excepting the ubiquitous cow-bells, which are such an acoustically prominent feature of that country. These bells, which have a weird melody of their own, vary considerably in size, some of them approaching the dimensions and simulating the shape, of an upturned kettle, and they are attached to the animal by means of a broad, adorned collar. Outside the chalet were displayed decorated tiles representing pastoral subjects, with mottoes in Swiss patois, while the furniture inside was made of the usual Swiss carved wood. Altogether, it is difficult to imagine a more artistic and "taking" advertisement for the products with which the name of this firm is so intimately connected.

Dr. P.—We have taken note of the information you have been good enough to place at our disposal, and we propose to deal with more fully in our next.

Meetings of the Societies, &c.

LONDON.

Wednesday, November 5th.

Obstetrical Society of London (20, Hanover Square, W.).—8 p.m. Specimens will be shown by Mr. Bland-Sutton. Dr. Comyns-Berkeley. Dr. V. Bonney. Dr. R. H. Bell, and others. Paper:—Mr. W. S. Handley: On Paratubal Hæmatocele.

Thursday, November 6th.

Rontgen Society (20, Hanover Square, W.).—8.30 p.m. Opening Address:—Mr. H. Jackson (President).

Harveian Society of London (Stafford Rooms, Titchborne Street, Edgware Road, W.).—8.30 p.m. Mr. A. Doran: Uterine Fibroids, considered from a Clinical and Surgical Standpoint. (Harveian Lecture.)

Medical Graduates' College and Polyclinic (22, Chenies Street, W.C.).—Impetigo: Dr. Colcott Fox.

North-East London Clinical Society (Tottenham Hospital, N.).—4 p.m. Clinical Cases.

Friday, November 7th.

West Kent Medico-Chirurgical Society (Royal Kent Dispensary. Greenwich Road, S.E.).—8.45 p.m. Paper:—Dr. J. H. Bryant: The Value of Blood Examination as an Aid to Diagnosis and Prognosis.

West London Medico-Chirurgical Society (Society's Rooms, West London Hospital).—8.30 p.m. Papers:—Mr. A. Doran: Choledochotomy in a Case of Chronic Jaundice with Cholangitis, Recovery.—Dr. F. J. McCann: Cases illustrating some of the Septic Complications met with during the Puerperal State.

Tuesday, November 11th.

Westminster Hospital (Broad Sanctuary, S.W.).—4.30 p.m.—Dr. Gossage: Medical Cases (Post-Graduate Clinical Demonstration).

Medical Graduates' College and Polyclinic (22, Chenies Street, W.C.).—Peripheral Neuritis: Dr. Judson Bury.

BELFAST:

Thursday, November 6th.

Royal College of Surgeons.—Council Meeting.

Friday, November 7th.

Royal College of Physicians.—Monthly Meeting, 4.30 p.m.

Monday, November 10th.

Royal College of Physicians.—Examination for Licence in Medicine commences.

Appointments.

Allport, Wilfrid, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Honorary Ophthalmic Surgeon to the Stratford-on-Avon Hospital.

Banham, H. A. L., L.R.C.P., L.R.C.S.Edin., Medical Officer of Health to the Urban District Council of Worsborough.

Benthall, Winfred, M.B.Cantab., Honorary Consulting Physician to the Derbyshire Royal Infirmary.

Burnett, R., L.R.C.P.Lond., M.R.C.S., by the Birmingham Board of Guardians a District Medical Officer.

Farrant, Mark, Jun., M.R.C.S., L.R.C.P.L., D.P.H.Lond., Medical Officer and Public Vaccinator by the St. Thomas (Exeter) Board of Guardians.

Fennell, Charles H., M.A., M.D.Oxon, M.R.C.P.Lond., Assistant Medical Officer to Darenth Asylum.

Harmer, W. D., M.A., M.B.Cantab., F.R.C.S., Assistant Surgeon to the Metropolitan Hospital, Kingsland Road, N.E.

Little, E. Graham, B.A. Cape Univ., M.D., M.R.C.P Lond., M.R.C.S.Eng., Physician for Diseases of the Skin at St. Mary's Hospital, vice Mr. Malcolm Morris, who has been appointed Consulting Surgeon

Maguire, W. J., M.B., B.S., R.U.I., Surgeon to the North District of the Royal Irish Constabulary in Belfast.

Messiter, A. F., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon, under the Factory Act, for the Epworth District of the County of Lincoln.

Plumbe, S. T., M.D.Lond., M.R.C.S., Certifying Surgeon, under the Factory Act, for the Maidenhead District of the County of Berks and the Taplow District of the County of Bucks.

Swain, James, M.S., M.D.Lond., F.R.C.S.Eng., Honorary Surgeon to the Bristol Royal Infirmary.

Thornton, Frank B., M.B. B.S., Honorary Physician to the Derbyshire Royal Infirmary.

Vacancies.

Bristol Royal Infirmary.—House Physician. Salary £100 per annum, with apartments, board, and laundry. Applications to "Secretary and House Governor."

County Hospital York. Lady Superintendent. Salary £80 per annum, with board, apartments, and washing. Applications to Fredk. Neden, Secretary and Manager.

Down District Lunatic Asylum, Downpatrick.—Junior Male Assistant Medical Officer. Salary £100 per annum, with furnished apartments, board, washing, fuel, light, and attendance. Applications to the Resident Medical Superintendent.

London Hospital Medical College.—Assistant Demonstrator of Anatomy. Salary £90 per annum. Applications to Munro Scott, Warden, London Hospital Medical College, Mile End, E.

Mercy Hospital, Cork.—House Surgeon and Compounder. Salary £80 per annum, with board, apartments, and light. Immediate application to Hon. Secretary at the Hospital. (See advt.).

New Ross Union.—Medical Officer (temporary). Salary £4 4s. per week. Immediate application to P. A. Pope, Clerk of the Union. (See advt.)

Natal Government Laboratory.—Assistant. Salary £500 per annum. Applications to the Agent-General for Natal, 26, Victoria Street, London, S.W.

Royal Dental Hospital of London, Leicester Square.—Dental Superintendent. Honorarium £250 per annum. Applications to J. Francis Pink, Secretary.

Royal Orthopædic Hospital.—Resident House Surgeon and Registrar. Salary £100 per annum, with board and washing. Applications to Tate S. Mansford, Secretary, 15, Hanover Square, W.

Worcester County and City Asylum, Powick, near Worcester.—Assistant Medical Officer. Salary £140. Applications to Medical Superintendent.

Births.

Appleyard.—On Oct. 28th, at Cranbrook Road, Ilford, Essex, the wife of Walter R. Appleyard, M.R.C.S., L.S.A., of a daughter.

Elkington. On Oct 25th, at Newport, Salop, the wife of E. A. Elkington, M.B.Lond., of a daughter.

Fisher.—On Oct. 29th, at 83, Wimpole Street, Cavendish Square, London, the wife of J. Herbert Fisher, M.B., B S.Lond., F.R.C.S., of a son.

Madden.—On Oct. 8th, at Cairo, the wife of Frank Cole Madden, F.R.C.S., of a daughter.

Mack.—On Oct. 28th, at 95, Tredegar Road, Bow, E., the wife of H. Hamilton Mack, B.A., L.R.C.P., of a son.

Moon.—On Oct. 29th, at Broadstairs, the wife of Edward G. Moon, M.R.C.S., L.R.C.P., of a daughter.

Marriages.

Bryson—Wilkins.—On Oct. 1st, at St. Mary's Church, Calicut, Malabar, Madras Presidency, Captain Reginald Bryson, I.M.S., to Sybil Edith Gwendolyne, second daughter of Colonel Hackett Wilkins, I.M.S., and Mrs. Hackett Wilkins.

Cann—Langdale.—On Oct. 23rd, at the Parish Church, Uckfield, Thomas Ponsford Cann, M.D.Durh., of Newhaven, to Ellen Myra, elder daughter of Henry Marmaduke Langdale, surgeon, Uckfield.

Clarke—Stevens.—On Oct. 28th, at St. Bartholomew's, Horley, Samuel Arathoon Clarke, M.R.C.S., L.R.C.P., to Helena Mildred, youngest daughter of the late William Carr Stevens and Mrs. Stevens, of the Oaks, Horley.

Forman—Corbett.—On Oct. 25th, at Fence Houses, Co. Durham, Bernard Gilpin Forman, M.B., of Cloughton, Yorkshire, second son of the late J. Forman, Esq., W.S., Edinburgh, to Fanny Evelyn, third daughter of Vincent C. S. W. Corbett, Esq., Chilton Moor House, Co. Durham.

Wood—Blackbourn.—On Oct. 29th, at St. Matthew's, Bayswater, William Charrington Wood, M.D.Lond., F.R.S Eng., son of Louis H. Wood, of Dulwich, to Ethel Lucy, daughter of William Blackbourn, of Spring View, North Kensington.

Deaths.

Browne.—On Nov. 2nd, at his residence, Frith Lodge, Northwood, Herts, Lennox Browne, F.R.C.S.E., of Mansfield Street, Cavendish Square, London, Consulting Surgeon to the Central London Throat Hospital.

Miller.—On Oct. 25th, John Alexander Miller, M.R.C.S., L.K.Q.C.P.Irel., of Percy House, Percy Circus, W.C., and of Colaba, Herne Bay, Kent, aged 54.

Morrison. On Oct. 14th, W. Morrison, L.R.C.S.I., of Rathfriland, Co Down, at Belfast.

Shepherd.—On Oct. 28th, at Leeds, Timothy Arundel Jordan Shepherd, M.R.C.S., L.S.A., son of the late Robert Walter Mexborough Shepherd, of Plymouth, aged 44.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, NOVEMBER 12, 1902. No. 20.

Clinical Lecture
ON
FLAT-FOOT. (a)

By W. BRUCE CLARKE, M.A., M.B., F.R.C.S.,

Surgeon in Charge of the Orthopædic Department,
St. Bartholomew's Hospital.

By the term flat-foot I mean the giving way of the longitudinal arch of the foot, so that the foot is no longer arched, but is practically flat, or, in other words, that pathological condition in which the astragalus comes right down on the surface of the ground. There are many people who are called flat-footed who are not, in the ordinary pathological sense of the term, suffering from flat-foot; that is to say, one person has a foot with a low arch, and another person has a high arch, but both walk equally well. Flat-foot is divided into two great varieties—congenital and acquired. The congenital form is exceedingly rare, and in a very large number of instances is completely recovered from without any plan of treatment whatsoever. The term congenital flat-foot is not a good one, and I do not think we should speak of congenital flat-foot at all, except in the very rarest cases. Most of them are really instances of slight flat-foot occurring in early childhood. The acquired variety is very common; indeed, it is among the commonest of deformities. If you want to test for yourselves whether a foot is flat, one of the simplest ways is to get the patient to dip his foot into a basin of water and then walk across a piece of kamptulicon, and if one foot is flat and the other is not, you will notice a great difference in the prints of the two feet.

What are the bony deformities which accompany flat-foot? All sorts of statements will be found in books as to the deformities which are to be met with. The deformities will depend entirely on the length of time that the person with the flat-foot happens to have been in that condition. In the early stage the first thing that happens is the coming down of the astragalus. After that, particularly as most of the cases of flat-foot begin before growth is completed, there will very often be a thinning out of the scaphoid. Sometimes the scaphoid is pushed up on to the dorsum of the foot, and when the foot is thus deformed there is extra pressure upon the cuboid, and it gets narrowest at its outer extremity, so that in very extreme cases the base of the metatarsal bone of the little toe touches the os calcis. That is very rare, but it does occur in certain cases which are exceedingly well marked and of long duration. Later on there sometimes is ankylosis of some of the bones, occasionally a bony ankylosis between the os calcis and the cuboid, or possibly an ankylosis between the astragalus and the os calcis.

What are the causes of flat-foot? The ordinary causes are spoken of as rickets, rheumatism, weakness of various kinds, and traumatic causes. Rickets throws the weight of the body on to the wrong portion of the foot, and predisposes no doubt to the occurrence of flat-foot, and inasmuch as in rickets there is deficiency of lime salts in the bones, and the bones are softer, they are no doubt more prone to yield to strain. Rickets thus plays a certain part in the production of flat-foot. In my own experience I can only say that I do not think there is any cause which is so likely to produce flat-foot as rheumatism. In fact, I am certain that in the vast majority of cases rheumatism is practically at the bottom of all this trouble. I will relate to you the typical history of a case of flat-foot which is associated with rheumatism. The patient was a woman, and she said she had had various attacks of pain about her from time to time, which were obviously rheumatic pains. She had two attacks of ordinary rheumatic fever, and subsequently had had severe pain about different portions of her foot. What was more, she found that this pain was very much relieved from time to time by the same remedies which had relieved her pains in other parts of the body. So much is this the case that I almost, as a routine treatment, put such patients upon salicylate of soda, because I find it does a vast amount of good. I do not say that every case of flat-foot is benefited by salicylate of soda, but the majority of them are, and the pain of flat-foot almost entirely vanishes under treatment with salicylate of sodium or other analogous drugs. Under the head of rheumatism we must include gonorrhœal rheumatism. Gonorrhœal rheumatism is very rarely the cause of severe attacks of flat-foot, but, when it does occur as a cause, it produces some of the very worst and most intractable flat-feet.

It is laid down in the books that it is people with weak fibre, and so on, who suffer from flat-foot, and there are vague statements about weakness being the cause. Then we hear of people standing too long in the pursuit of their occupations, and so on. It always seems to me that there is but the slenderest evidence to show that weakness or lack of fibre, or whatever term is given, is, strictly speaking, a cause of flat-foot at all. I do not believe flat-foot is produced in ordinary weak people unless they have some definite disease in connection with their feet. I am certain that the vast majority who are supposed to be suffering from weakness merely, are actually suffering at the time when their flat-foot lesion begins from some form of rheumatic trouble. One of the best arguments against mere weakness producing flatness of the foot is that a person's foot may be found much weakened by tuberculous mischief, and yet flat-foot will not necessarily follow. A great many of the people who are supposed to be suffering from flat foot in consequence of weakness have either badly-fitting boots and shoes, or else have boots and shoes which let in a vast amount of water, and the consequence is that they suffer from rheumatism in the feet. One of the causes not sufficiently laid stress on is ordinary hallux valgus, or the painful great-toe joint of adolescence. I draw your attention to one fact in connection with flat-foot, namely, that nearly all such cases show considerable thickening about the great-toe joint. Let us think for one moment why hallux dolorosus produces flat-foot, and then we shall see why it is that various traumatic causes also produce flat-foot. In the ordinary way when walking one raises himself to a certain extent upon one's toes each time one moves forward. By so doing one exercises the muscles, ligaments, &c., of the soles of the feet, as well as the muscles of the leg. But if one has a painful great-toe joint one cannot do this because of the pain, and therefore one gets into a vicious way of walking. Instead of raising oneself up on tiptoe each step one takes, one walks with the foot stiff and with the feet turned out, a posture characteristic of the agricultural labourer when he follows the plough, wearing an exceedingly stiff pair of boots. If one goes on walking with one's foot absolutely stiff in that position it is certain, sooner or later, to result in a certain degree of flat-foot, because the tissues will have become weak from lack of exercise.

(a) Abstract of a Clinical Lecture delivered at St. Bartholomew's Hospital.

The most common among the traumatic causes of flat-foot are dislocations and injuries about the bones of the foot in the neighbourhood of the ankle-joint itself, including Potts' fracture. These cause flat-foot exactly in the same way as hallux valgus does. For a considerable length of time the patient who is suffering from these lesions is unable to use his foot in the ordinary way, and the foot is weakened by lack of exercise. That brings me to one of the indications for treatment which I may refer to here. Whenever a person has a foot so far damaged that he is unable to use that foot satisfactorily, he should always rest it moderately and take care of it until he can begin to resume his muscular action; otherwise he is very liable to get flat-foot resulting. The only symptom of flat-foot which is absolutely unequivocal is the pain; if a person complains of a certain amount of pain in or about the centre of the arch of the foot, and if that pain runs down into the great toe or into the heel, always be very suspicious of incipient flat-foot. Those pains are, in many instances, nothing more or less than the first onset of a slight attack of rheumatism. Patients come complaining of attacks of this nature, and if treated with salicylate of soda they go on for a considerable time without suffering any more pain, and may even be able to do without the special boot which has probably been ordered for them before I have seen them.

What is the course which the disease tends to take supposing that nothing whatever is done for the patient? In flat-foot there is absolutely no tendency whatever to spontaneous cure except in children, that is to say, this disease gradually progresses and gets worse and worse unless something is done for it. In the course of the disease, one of the most important things is the fact that the pain appears and disappears from time to time. A person may have exceedingly painful flat-foot, and may come for treatment. You may treat it by any of the various means I am referring to, and the patient may get better, and he may go on with the foot still flat, but not painful, for perhaps six, ten years, or more. And then suddenly there may be another attack of pain, and the foot will tend to get more flat still. At these stages of exacerbation, I do not think you will have much difficulty in satisfying yourselves that, as a general rule, these attacks are due to rheumatism, which comes on at different periods of the patient's existence. Sometimes you will notice that a patient increases in weight, and consequently puts a considerably increased weight upon a foot which is already weakened. In some instances that explains why it is that the foot gets worse from time to time, and better again at other times. And I think I may go so far as to say this, that every person who increases inordinately in weight sooner or later suffers with his feet in one way or another. I am often saying that one of the most important diseases which we have to treat, and which we ought to regard as a disease, is obesity. I do not think we should allow anybody to get beyond a certain stage of fatness without treating him for it. To put five, six, seven, or eight stone more on the feet than they were intended to bear is one of the most fertile causes of an increasing degree of flat-foot that can be imagined.

What are the treatments which we ought to adopt? What can we do for flat-foot in its different stages? The first thing to remember is the course of the disease. The treatment which is applicable to one stage of the disease is absolutely inapplicable at another. So long as a patient is suffering merely from pain, I am in the habit of describing it as merely a tendency to flat-foot. At this stage, when there is only a tendency to the condition, and it has not yet been established, a cure can nearly always be effected by giving salicylates, because the majority of cases at that stage are nothing more nor less than rheumatism. In other words, there is rheumatism in the fibrous tissue of the sole of the foot, and these tissues are becoming gradually softened; the weight of the body acting on these softened tissues causes the arch of the foot to give way.

The next important thing is to train the muscles. If you ask people what sort of treatment they are going to adopt for flat-foot, they will say, in most instances, "muscular exercises." Muscular exercises are all very well, but they must not be ordered indiscriminately. The patient's foot must be sufficiently free from pain to enable him to perform exercises. But freedom from pain is not the only condition which is necessary for the performance of the exercises. A comparatively painless foot may be ankylosed in a certain position, and, if this is the case, exercises will be of no avail whatever until the ankylosed joints are broken down. It must be brought back into the position in which it is capable of moving. Treat any dislocation which has taken place here much in the same way as you treat any other dislocation: try to reduce it. Having restored the arch of the foot there will be some difficulty in keeping the foot in that position to which it has been unaccustomed for so long. In other words, having more or less restored the arch of the foot, it must be kept in position by putting it in plaster for five or six weeks, or longer. At the end of that time the patient will probably be able to perform certain exercises. The exercises which they ought to perform are, first of all to raise themselves up on tiptoe four or five times night and morning, and then to roll the feet from the outside edge to the inner backwards and forwards, as people do when skating. If they can perform these exercises, I am sure that, provided they get no further rheumatism, they may look forward to, I will not say in all instances to cure of their flat-foot; but, at any rate, to a cure of the symptoms which make this flat-foot uncomfortable to them. If, on the other hand, the patients cannot perform those exercises, in all probability the bones have been much more deformed in the way in which I have referred to earlier in this lecture, and there may be some synostosis between the bones. The result of this is that such patients are unable to get their feet into anything like a natural position. Under those circumstances it is often customary to order supports for them. Personally I am not very fond of supports. Although I do not mean to say that there are never feet which require instruments of various kinds, I say those instruments should be used as rarely as possible. One of the instruments used is sometimes spoken of as a flat-foot boot, which may be of the first, or the second, or the third degree, as it is called. Sometimes we put into the boots what are called valgus pads, which may be composed of horsehair, or rubber, or leather, or glycerine. Glycerine I do not advise, because it may burst in the boot, and that would not be very comfortable. We also have, for extreme cases of flat-foot, a form of boot, in which an iron is fixed to the outside of the boot, and a valgus T-strap, which pulls the foot up in this direction. That strap is affixed, directly or indirectly, to the outside iron, and sometimes to a ring that goes round the calf as well. These are the usual methods of instrumental treatment which we adopt for flat-foot. Sometimes we use steel soles inside the boot. An objection to treatment by all these instruments is that the patients often complain that the pressure on the under surface of the sole of the foot is so great that they cannot stand the instrument.

Although definite surgical operation is rarely called for, there are a certain number of cases in which it is absolutely essential. There are various operations:—One consists in removing a wedge-shaped piece of bone from the inside of the foot, and so rectifying the deformity by giving the patient a more or less fixed arch to the foot. In the cases upon which we operate the arch of the foot has long been immovable, and therefore by the operation we are not, as is often said, taking away movable joints, but we are giving our patient a foot which he can readily walk upon, and which is fixed in proper position in place of one which is fixed and painful, and on which he cannot walk. Amputation may have to be performed in certain instances.

The treatment from which you can hope for the best results is the one which I speak of as muscular exercises, but I ask you to bear in mind that the matter must be looked at from a sensible point of view. You must look at every foot for yourself, and satisfy yourself that the patient for whom you order exercises is able to perform them. Each patient must be carefully instructed as to the particular exercises he must perform.

THE TREATMENT OF CANCER BY PHOTO-THERAPY. (a)

By DAWSON F. D. TURNER, F.R.C.P. Ed.

In a paper read in 1894 the author referred to the treatment of goitre in India by the red iodide of mercury ointment and the rays of the sun, and suggested in explanation that the effect produced was due to the radial heat rays. The results of this treatment were extraordinary; 60,000 natives were treated, and a cure was almost always effected. A few years ago Finsen, who had been experimenting with the red end of the spectrum on small-pox, turned the attention of the medical world to the curative effect of the other end of the spectrum—the blue, violet, and ultra-violet rays. These forms of radiation do not differ in any physical respect from ordinary light. The red rays are longer, produce the sensation of heat, and do not affect the ordinary sensitive silver salts; the violet rays are shorter, powerfully actinic, and scarcely affect the temperature sense; on the other hand, while the red rays penetrate the epithelium and softer structures, the violet rays have little penetrative power and are absorbed and stopped by the blood. What the Röntgen rays are nobody yet knows, but they do not behave like ordinary light rays, opacity to them being a question of density, all light bodies being transparent. Thus they pass through the skin and soft tissues with great facility, but throw shadows of the bones. They appear to have no bactericidal effect; while ultra-violet light has a marked action in destroying bacteria. The pathological effects of the rays are also different. The actinic rays produce within eighteen hours a transitory erythema consisting in an inflammatory dilation of the vessels with infiltration and œdema. In the case of lupus Macleod found that the rays caused a degeneration of the granulomatous tissue and the destruction of its vitality, but that in the case of healthy tissue their effect was negligible. The Röntgen rays produce more profound vascular and trophic changes, particularly if soft tubes be used, but this effect is cumulative and requires time for its establishment; its appearance may even be delayed for a fortnight or more. The skin becomes hyperæmic and of a deep reddish-violet hue; purulent dermatitis may follow, attended sometimes by intractable ulcers, and even by cancer. The minute changes consist in vacuolation of the endothelium of the blood-vessels, with thickening of the intima leading to thrombosis, in disintegration of the elastic tissue, and in disappearance of the hair follicles and sebaceous glands. The writer ventures to suggest the following theory as regards the action of these rays in cancer. As they will destroy, if pushed, the healthy skin by a species of burn, it is probable that they will more easily and rapidly destroy the lowly-organised malignant growth, and our aim should therefore be so to time the exposures as to disintegrate the abnormal without damage to the normal. The proper selection of a tube is most important: for superficial growths with ulceration a very soft tube should be chosen; if the skin be intact a more penetrating tube; while for internal growths a tube yielding still more penetrating rays should be used. He had only employed the Finsen light in the treatment of cancer for subcutaneous nodules where the skin was intact and the necessary pressure could be borne. In one such case the cancerous nodules disappeared as if by magic.

The following conclusions as to treatment might be stated:—

1. External cancer before ulceration may be treated by X-rays or Finsen light, preferably the latter.
2. After ulceration X-rays should be used.
3. For internal cancer only the X-rays are available.
4. Clinical results of the treatment are to remove or diminish pain, to loosen adhesions, to cause ulcerating and sloughing surfaces to take on healthy action and to diminish in size by the ingrowth of the epithelium from the edge, and occasionally to dissipate cancerous or sarcomatous tumours.

Details of eighteen cases of inoperable cancer were then given; nine affecting breast, two the tongue, and one of each of the following:—Penis, cervix, rectum, scalp, inguinal glands, larynx, neck. All but these showed improvement, the breast cases being the most successful and the tongue cases least so. Recurrence was usual, and no definite cure had been seen; the treatment was a race with the disease, and a stage could be arrived at in which one or two exposures per week will suffice to keep the disease in abeyance and to remove any distressing symptoms.

(a) Abstract of paper read before the Edinburgh Medico-Chirurgical Society, November, 1902.

PATHOGENIC VARIETIES OF BACILLUS COLI IN ICE-CREAMS. (a)

By PROFESSOR E. KLEIN.

THE *role* of the group of Bacillus coli in the causation of disease is becoming daily more recognised, particularly in reference to the presence of these microbes in foodstuffs, which thereby become endowed with the power of causing acute gastro-enteritis in the consumer. It has been proved that the particular variety of B. coli known as the Gaertner bacillus is the cause of acute gastro-enteritis in a number of outbreaks of this disease induced by the ingestion of certain meat foodstuffs. But it would not be justifiable to ascribe all occurrences of disease of this character to this particular variety, namely, the Gaertner bacillus, nor would it be without a tendency to confusion to regard all microbes as belonging to the group of Gaertner bacillus which in rodents are capable of causing acute gastro-enteritis as part of a general hæmorrhagic septicæmia. In my experience there exist various microbes of the coli group, but which do not belong to the Gaertner group, which can cause, and moreover which have caused, acute gastro-enteritis, and I am fully in accord with most bacteriologists who have experience in this matter by excluding from the Gaertner group such microbic species as the bacillus of fowl cholera, the bacillus of swine plague, and the bacillus of swine fever, although these microbes are capable on ingestion of producing in rodents, in a considerable percentage of the experimental animals, acute gastro-enteritis as part of a general hæmorrhagic septicæmia. In respect of microbes which certainly do belong to the Gaertner group, and which have caused acute enteritis in human beings, I may be permitted to refer to two notable outbreaks of meat poisoning which have been described in the Reports of the Medical Officer of the Local Government Board. The first—the Carlisle outbreak—is described in the Report for 1889. Here it was pork and gravy stock which had been at fault. From the same establishment and from the same stock from which the poisonous pies had been derived pork and gravy stock proved capable of causing, by feeding of mice, acute gastro-enteritis and death in a large percentage of the animals. From these animals a microbe was isolated which, on inoculation and by feeding of further animals, proved highly virulent. This microbe certainly did not belong to the Gaertner group, since its growth caused slow liquefaction of gelatine. Another outbreak—the Portsmouth meat-pie poisoning—was published in the Report of the Medical Officer of the Local Government Board in 1890, p. 249. In this outbreak the poisonous nature of the meat-pie was fully confirmed by experiments of feeding mice with the meat-pie; the microbe isolated both from the pie and the experimental animals was a virulent B. coli, which certainly does not belong to the Gaertner group. Now it may not be unnecessary if I here restate the characters which bacteriologists assign to the variety of B. coli known and considered as the "Gaertner bacillus." The Gaertner bacillus in respect of the nature and aspect of the colonies in the plate, in streak, stab, and shake culture in gelatine and agar, in its growth in carbolised broth, in its general morphology, in its inability to stain by Gram, in its giving positive neutral red test, admittedly belongs to the group of B. coli, but it differs from the typical B. coli communis in the following respects: B. Gaertner does not clot milk; B. Gaertner forms alkali (litmus milk and litmus broth becoming gradually blue); B. Gaertner ferments produces CO_2 gas from glucose like B. coli communis, but B. Gaertner does not ferment lactose (B. coli does so); B. Gaertner does not form indol in broth; B. Gaertner is multiflagellated similar to, though not identical with, the Bacillus typhosus. There are, therefore, a number of characters, morphological and cultural, by which the B. Gaertner is readily distinguished. To this must be added also that B. Gaertner is virulent to rodents subcutaneously injected even in minute doses, and in larger doses it is capable sometimes of causing general infection also by ingestion. On the other hand a microbe which produces acid in cultivation, which curdles milk, which ferments both glucose and lactose, which is not multiflagellated, which produces indol in broth culture, cannot claim to be considered as B. Gaertner, but must be content with a place in the group of B. coli communis. Now, a microbic species of this kind, but possessing highly virulent character, I have isolated from certain samples of ice-creams, which I shall describe in detail presently. I may at once say that the culture of this microbe caused, on inoculation of minute doses into rodents, general hæmorrhagic septicæmia, including acute gastro-enteritis and peritonitis, and death within twenty-four to forty hours. Injection of culture caused illness of the majority and death of a proportion of the animals experimented on. On *post-mortem* examination of the latter acute and severe gastro enteritis and peritonitis were found, the whole of the small intestine being deeply congested, relaxed, filled and distended by sanguineous masses. I show under the microscope a specimen of the sanguineous exudation filling the subcutaneous and muscular tissues of the abdomen and chest of an animal that died within twenty-four hours after subcutaneous injection of a minute quantity of a particular sample of ice-cream. Culture by plates proved that the bacilli which you see almost densely filling the exudation belong to one and the same species; and further inoculations with the exudation (one or two drops for a half-grown guinea-pig) caused the same fatal disease with the same distribution of the microbe in the dead body. Not only were the subcutaneous tissue full of the sanguineous exudation crowded with the bacilli, but also the lungs, the pleural and pericardial cavities, the peritoneum and the intestines. A second specimen shown under the microscope is a stained film of peritoneal exudation of a guinea-pig which had died within twenty-four hours from acute gastro-enteritis after feeding with a gelatine culture of the bacillus. Plate culture made with this peritoneal exudation proved the bacilli to belong to one and the same species, namely, the species used for the feeding. The microbe in question belongs undoubtedly to the coli group; in morphological and cultural respects it is closely related to the typical Bacillus coli communis, from which it differs in certain respects. It is more motile in the hanging drop than the B. coli communis, although it possesses only 1 to 5 flagella. Like B. coli it ferments glucose and lactose; it curdles milk, produces acid, and doubtful or slight indol (?); in broth culture it gives positive results in neutral red test. On potato it forms a colourless thin film, and, as already mentioned, is highly pathogenic, both by subcutaneous injection of small doses and also by ingestion of gelatine culture. I produce here cultures of B. coli communis, of B. Gaertner, and of our pathogenic ice-cream bacillus, to show their chief points of cultural differences and resemblances. The sources from which the above microbe was obtained were, as mentioned already, samples of ice-creams. Dr. Collingridge, the Medical Officer of Health for the City of London, had been informed by the Medical Officer of the General Post Office that two telegraph boys (afterwards it appeared that altogether thirteen suspicious cases had come to the notice of the Medical Officer of the General Post Office) had been taken ill with what appeared to be acute gastro-enteritis, believed to be due to poisoning by ice-cream bought at an Italian shop in Aldersgate Street. Dr. Collingridge therefore sent to me for analysis and experiment samples of ice cream that were bought at these shops. Both samples were, indeed, found to contain poisonous properties, inasmuch as the injection of ½ c.cm. to 1 c.cm. subcutaneously into half-grown to full-grown guinea-pigs caused extensive inflammation and gangrene of the subcutaneous and muscular tissues, as also intensive inflammation of the peritoneum, of the stomach and intestine. In the exudation anaerobic microbes, as also, and in great abundance, the highly-virulent variety of B. coli, were met with. On further transmission by subcutaneous injection of a drop or two of the sanguineous exudation this particular species was obtained almost in pure culture. Not only in those samples but in several other samples of ice-cream sent to me for analysis by Dr. Collingridge was this or some very similar highly virulent variety of B. coli met with, and I would particularly refer to a number of samples taken at different dates from different shops, but all supplied by one and the same maker. They all proved of the same poisonous nature, and this character persisted until the maker abandoned the highly insanitary conditions then prevailing on his premises, and complied with the suggestions and requirements of the medical officer. As soon as this change took place the ice-creams became harmless; injection of 1 c.cm. of the material into small guinea-pigs failed to exert any pathogenic action. The materials from which the ices were made were themselves found to be harmless, and therefore the poisonous nature of the ice-creams must have been due to admixtures by the extremely insanitary local conditions under which the ices were made, the uncleanliness of the manipulating persons, and the storing and keeping of the "stock" of ice-creams in filthy places. This latter malpractice is particularly favoured by some makers, namely, the ingredients are mixed so as to form a common stock; this is used for freezing in such quantities only as are likely to be required for sale that day. The rest is kept in a dirty place for future freezing and sale. No better confirmation, I think, of the correctness of the recently passed law (as regards the manufacture and sale of ice-creams) could be desired.

(a) Abstract of paper read before the Pathological Society.

STANDARDS FOR DRUGS. *(a)*

By H. WHIPPELL GADD, F.C.S.

The study of drugs is not a popular one: despite the proverbial love of the druggist for water, it is essentially a dry subject. Moreover, the tendency of modern medicine is to rely less upon physic, and more upon physical conditions, to see that the public health is maintained by sanitary surroundings, rather than to attempt the relief of the diseases of the public by drastic dosing. "Throw physic to the dogs" would be a popular motto for this Congress, if we had not learnt to be merciful to the brute creation. On the other hand, there never was a time when so many new drugs were being introduced, and the spread of education, far from suppressing quackery, seems but to have opened new avenues for the exploiting of nostrums.

A perusal of the public press makes one wonder why any disease remains, when all can be cured for thirteenpence halfpenny, but we are only concerned with what may be called "legitimate drugs," that is to say, remedies of known origin and proved potency. And it is for such that standards are necessary, if to their potency is to be added the equally essential property of uniformity.

"*Caveat emptor*," which to a great extent applies to foods, has little meaning for drugs. Every man (and still more every woman) thinks himself able to judge the quality of the food in the market, but the value of drugs cannot be assayed by "the man in the street." His experience is usually limited to shutting his eyes, and obscuring his senses of taste and smell, whilst the physic makes its nauseous but necessary passage down his throat.

Drugs may be roughly divided into three classes:—(1) Vegetable products and their preparations. (2) Animal products. (3) Substances of definite chemical composition.

1. From the earliest times, man has sought relief from the ills to which his flesh is heir in the herbs of the field, and to-day we use all kinds of vegetable products —roots, barks, stems, flowers, fruits, seeds, gums, resins, and many others. Many of these have been selected empirically, but their efficacy having been proved, it is important that there should be as little variance as possible in commercial samples.

The point of first importance is identification: Plants closely allied botanically often differ widely in their therapeutic effects. A drug having been found useful, a demand is created, and at first high prices are obtained: ignorant or dishonest collectors send large supplies of the true or any allied species to the market the drug becomes discredited and prices drop; the consequence being that it is no longer remunerative to collect the genuine article, and it ceases to be obtainable.

That this is no fancy picture can be testified by anyone who in recent years has had occasion to buy (or try to buy) jaborandi leaves or pareira roots, or strophanthus seeds. It requires a botanical expert to detect the difference between the leaves of pilocarpus jaborandi and some allied species; yet some of the latter are almost destitute of the alkaloid pilocarpine, and their therapeutic properties are probably equally poor. The literature of strophanthus is voluminous; yet to-day most of us have to trust to a somewhat unsatisfactory colour reaction to prove the identity of the commercial samples which come into our hands. Why cannot the very active authorities of the City of London for once take a vacation from their congenial work of buying pennyworths of harmless if necessary drugs from hucksters, and devote their energies to obtaining samples of the potent drugs offered in quantity in the auction rooms of their city?

Drugs having been identified, should if possible be assayed: for the mode of collection, the conditions of cultivation, the influence of climate and many other factors tend to produce variations of strength.

To take a simple example, jalap root, which depends for its activity on its resin, has been found to contain this constituent in quantities varying from 5 to 20 per cent. One can almost believe the story which is told of a Professor of Materia Medica in an Irish School of Medicine. "Gentlemen," he is reported to have said, "These are the properties of jalap, but I must warn you that the jalap supplied to this hospital is astringent in its action." Opium, again, varies much in strength, and is assayed for its morphine content, cinchona for its total alkaloids and percentage of quinine and cinchonidine, nux vomica for its strychnine (not, I trust, by the unmodified pharmacopœial method, which gives results varying with the taste and fancy of the analyst), ipecacuanha and belladonna for their alkaloidal strength.

When the active principle of a drug is unknown or cannot readily be assayed, its value can sometimes be approximately estimated by treating it with solvents, by incinerating and noting the yield of ash, and by applying other simple tests. For example, the pharmacopœia requires that gum benzoin should be "almost entirely soluble in alcohol 90 per cent.," whereas commercial samples often contain as much as 30 per cent. insoluble matter, chiefly bark, which is harmless but inert.

Obviously, if a gum cannot be obtained which answers the official test in making preparations, such as "Friar's Balsam," allowance should be made for the foreign element, a proportionately larger amount of commercial gum being used than would be required if the pure product could be obtained. Again in the case in the now rarely used drug assafœtida, the ash figure is a fair criterion of quality. Commercial samples on incineration often leave a residue equal to 50-60 per cent. of their weight, consisting as they do of about half gum and half stones.

From vegetable drugs, we naturally pass to their preparations, "Galenicals" as they are called, after the Greek physician, who is said to have introduced them. These are valued in much the same way as are the crude drugs. Thus laudanum is standardised to a percentage of morphine, the preparations of belladonna and ipecacuanha to total alkaloidal strength, tincture of nux vomica to its strychnine content, tincture of jalap to a percentage of resin, and others in like manner. Again, as with the crude drugs, when accurate analysis is difficult or impracticable, simpler tests may be used, such as specific gravity, alcoholic strength, and percentage of dissolved matter, or extractive.

With regard to these latter, however, a wide range must be allowed in fixing standards, for even genuine

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(*a*) Abstract of paper read at the Exeter Congress of the Royal Institute of Public Health.

samples show very considerable variation. Thus, samples of tincture of capsicum have been found to contain a percentage of extractive, varying from 0·7 to 1·5 per cent., tincture of gelsemium may yield from 0·9 to 2 per cent., and tincture of strophanthus from 0·35 to 0·75 per cent. Solid extracts, which should have a definite relation to the crude drugs, from which they are prepared, may be approximately standardised by directing that they be concentrated to a given weight, instead of to "a soft extract," "to a suitable consistence for making pills," &c.

2. Chemical substances having definite composition do not require the same treatment as vegetable products; but seeing that absolute purity is seldom attainable, sometimes undesirable, and usually incompatible with commercial conditions, standards are necessary to fix limits for impurities. Impurities may be inert substances, acting simply as diluents, or they may be actively injurious, as, for example, arsenium, lead, and copper. Each salt used in medicine should be required to pass such tests as will ensure its freedom from injurious substances in appreciable quantities, and from harmless impurities in quantities that will materially impair the efficacy of the medicine.

3. Animal products, such as antitoxins, are, of course, standardised by physiological tests, a method of assay which in this country can be used to a very limited extent, although drugs thus tested are fully admitted from other lands.

I have tried to show that standards are needed for drugs, it remains to be considered:

(1) How they may be fixed.

(2) How they may be maintained.

How may they be fixed?

The British Pharmacopœia is in some sense the official standard, that is to say, it is the physician's prescription book, which the pharmacist is bound to use, but it was never meant to be set up as an authority under the Sale of Food and Drugs Acts, and if it is to be used as such it must be compiled with greater care and interpreted in the light of common sense. For example, because carbonate of sodium is an official salt, it need not be held that every lump of washing soda which the laundress purchases must correspond to the formula $Na_2 Co_3$, 10 H_2O, "only that and nothing more."

Processes for the assay of important drugs, such as nux vomica, must not be inserted without trial. It is no answer to criticism to say that further research is needed. Research must precede publication or disaster will follow it. If pharmaceutical products are to be judged by the Pharmacopœia, pharmacists must assist in its compilation, as they do in every (other) civilised country.

Again, if standards are to be fixed, they must be based not on museum specimens, but on the best obtainable commercial samples. It has been wisely said that "the best is often the enemy of the good." Too high a standard may result in a limited supply of the finest specimens at prohibitive prices, with indefinite and unguaranteed products for general use. Just as a thoughtful legislature has provided that if a man be unable to attain the educational standard required by the Pharmacy Act, he may contract himself outside its scope by joining with six other unqualified persons and becoming a limited company; so, if the standard for a drug be unattainable, it may result in compounds being sold which are not amenable to any restrictions.

It cannot too often be reiterated that in dealing with medicines uniform mediocrity is preferable to alternate strength and weakness.

Lastly, how may drug standards be maintained?

First and foremost by education of druggists. Skilled collectors, skilled manufacturers, skilled distributors, skilled dispensers, are the best guarantee of satisfactory products. We do not like indifferent cooks. We dare not trust incompetent chemists. And it follows that there must be adequate remuneration. Charles Kingsley led a crusade against "cheap clothes and nasty"; we want a new prophet to preach that cheap drugs are nasty. The ordinary principles of commercial competition are not applicable to the weapons with which physicians fight disease. Only in the last resort should standards be maintained by penal proceedings.

For the wilful adulterator, the miscreant who, for the sake of a little profit, would jeopardise the sick man's chance of life, the laws of England provide no adequate penalty (hanging being a merciful form of death). Carelessness in important matters is only a minor form of crime; but technical breaches of the law should not be treated as criminal offences. For example, when such a rigid Government department as the Excise has decided that certain liniments, being absolutely unpotable, may be made with methylated spirit, it is obviously unfair that tradesmen should be prosecuted under the Food and Drugs Acts for selling such. Again, when not for the sake of extra profit, but for the safety of the public, mercurial ointment is diluted before being sold, a penalty is unsuitable, when praise only is due.

The standardisation of drugs is a wide subject, which can be viewed from many points, the medical, the analytical, the pharmaceutical, the commercial, but more important than any of these is the question "How can drugs be standardised for the benefit of the Public Health?" And that must be my excuse for presenting these somewhat discursive remarks to this important congress.

Clinical Records.

TWO CASES OF NEURASTHENIA TREATED BY OPERATION.

By J. Stuart Nairne, F.R.C.S.,
Senior Surgeon, Glasgow Samaritan Hospital for Women.

This patient, married four years, had no children. She was a well-educated woman, having travelled much. She had never felt very well since her marriage, although neither she nor her husband attributed her ill-health to the marriage.

She was strongly marked with small-pox, but, notwithstanding, had a considerable share of good looks, of which she was not unaware; and perhaps there may have been an idea in some minds that part of her trouble consisted in realising she might have been still better looking if she had not been marked with the small-pox. Be this as it may, she was of variable temperament, now up, now down, happy and miserable and morbid by turns. Indefinite pains troubled her, pains that she could by no means locate, and other physical pains and aches troubled her definitely enough in the usual sites of loins, flanks, back, spine, and head. She suffered from dysmenorrhœa, and the menstrual flow was clotted, dark and tarry, with sometimes a smell.

Her husband was an educated gentleman who dabbled in hypnotism, Braidism, and spiritualism. He told me, and she told me, that he had put her frequently into the mesmeric sleep, specially when she was very ill. He had sent her off into this sleep and given her rest when nothing she did did her any good. They were both anxious that something radical should be done—anything so that there was a prospect of definitely and permanently curing her.

I examined her; found the pelvic conditions sufficient to justify me in saying that I believed a laparotomy, with liberty to remove the appendages if I thought it necessary, would probably be a permanent cure. Both parties said they had had such an idea in their minds, and were prepared to abide by my decision. The gentleman suggested that instead of the ordinary anæsthetic he should put his wife into the mesmeric sleep. I consented with a considerable degree of alacrity, for, although I had years before done some minor operations under the hypnotic condition, I had never had the opportunity of performing a major operation under the same condition. This being agreed to, I thereupon asked him at the earliest opportunity to exhibit his power over her and send her to sleep, in order that I might judge whether the sleep would be deep enough for my purpose. I am sorry to add that the lady was never put to sleep. His power had gone, and try again and again as he might, nothing came of it. The lady remained wide awake.

Nevertheless the operation was still determined on, and we overcame the little difficulty with the usual anæsthetic.

At the operation I found the left ovary grossly affected with cystic disease, and the right not visible. The uterus was rigid, but not very markedly so. Under these circumstances I gave her the benefit of the doubt an removed only the left appendages. She made an easy recovery, and was well when she left the Home. So long as she remained in Scotland she was well, but when in the course of a few months she had to leave for India my repentance began. It was, I am sure, misjudged mercy—a fallacious conservatism; for she slowly relapsed into her former condition, and I heard from her last year as desirous to return and have a complete removal of the other appendage. I believe she is right, and I believe also that, granting she recovers from the operation, she will be quite rid of all her troubles thereafter. I do not reckon this case as a success, but as one that has many plain lessons on its face.

The second case is that of Mrs. M., a married woman, æt. 45. Whatever shadow of a doubt I had had with regard to the diagnosis of neurasthenia and hysteria in association with the uterine condition was dissipated by my study and treatment of this case.

Mrs. M. had been under treatment for a long time by a most intelligent and well-educated practitioner. She herself was a woman of outstanding simplicity of character—full of sense as well as sensibility. None of us were in any special hurry to anticipate trouble, and so long as we could keep her going on reasonably we did not consider it was wise to perform or even suggest an operation. By and by, however, the condition became unbearable, and her distresses increased every day. She suffered constantly from pains and aches, fears by day and terrors by night, only now and again snatching an easy hour of peace of mind and body when her pains ceased. At last an operation was suggested, and on June 29th, 1899, she writes :—"You don't know how an operation haunts me, and consequently unnerves me. For the last two days I have had constantly that horrid dull pain in my left side, not the bowel you know. My headache is gone. I am sleeping well at night and don't feel so tired through the day, because I am taking more rest." The operation was done and the conditions were found exactly as I anticipated. The ovaries and tubes were distinctly inflamed and cystic, but not more so than one might reasonably expect in a long standing case of pelvic disease, and certainly not beyond what one would expect to yield to ordinary medical treatment, but the uterus itself, enlarged with fibroid degeneration, stood erect in the pelvis, and was the prominent sign immediately on opening the abdomen.

She was upset and hysterical for several days after the operation, but soon settled down. Her recovery was uninterrupted, and has remained permanent. From being a wasted and anxious creature she wrote on December 13th, 1899, that she felt much stronger, although she still had fits of nerves and sleeplessness, but that was improving. On March 11th, 1900, she wrote, "I am getting fine and well, rosy plump cheeks. I weigh nearly nine stone. You would not recognise me as the fretful patient you had in St. Margaret's Home."

TWO CASES OF MYCOSIS FUNGOIDES. (*a*)

By W. Allan Jamieson, M.D., F.R.C.P.Ed.,

Physician for Diseases of the Skin, Edinburgh Royal Infirmary.

One of these exhibited unusual features and terminated fatally; the other showed the more ordinary appearances and quite remarkable results from exposure to X rays.

Case 1.—The patient was a man æt. 66, who was admitted to the Royal Infirmary in May, 1901 He had had syphilis forty-three years before, but had had no "reminders." Three years ago transient lesions had occurred, and typical syphilitic scars could be seen on the inner aspects of the knees. A year ago an itchy scaly eruption had begun on the head and face, and partially on the limbs, becoming red, weeping, and crusted, breaking down into eroded or ulcerated areas, which scar over only to become raw again. The hair was completely destroyed over the parts of the scalp affected. No definite tumours were detected, there being only a superficial infiltration followed by extensive ulceration. Notwithstanding the atypical character of the lesions, the microscopic appearances were those which characterise mycosis fungoides. Antispecific and local treatment alike proved unavailing, the patient dying with marasmus and mental aberration.

Case 2.—The patient was a woman, æt. 54, who showed the classical appearance of mycosis fungoides, and was admitted in June, 1902. She herself and her children had always been healthy. There was a history of a premycosic stage of erythrodermia and itchy eczematoid lesions on head, lasting ten years. On admission there many tumours, some fungating and sloughing on the face, erythrodermic and scaly patches, and some tumours on the body. Under treatment with X-rays the tumours and eczematoid eruptions disappeared completely; the rays, however, did not wholly prevent new lesions appearing elsewhere, but these again yielded like their predecessors. Sixty sittings, lasting about one and a half hours each, were given. Each nodule was exposed to the rays of a soft tube for three or four minutes; there was no great reaction. Contrasting the two cases, the speaker pointed out that it first began as a scaly eczema turning moist and breaking down. Though there were no nodules, the microscopic characters were conclusive as to the nature of the disease. The previous syphilis seemed to have no bearing on the case, and the anti-syphilitic treatment did harm rather than good. The second case was typical — dry, scaly eczema and tumour formation. It was of interest to note that twice within two years the patient had suffered from erysipelas, an affection which was said to exert a beneficial effect in some cases of mycosis fungoides, without there having been any improvement whatever. As to the microscopic appearances, these were not such as to warrant any opinion on the nature of the affection, some observers looking on it as a sarcoma, some as a lymphadenoma, and others as an infective granuloma.

Transactions of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Meeting held Wednesday, November 5th, 1902.

Peter Horrocks, M.D., F.R.C.P., President, in the Chair.

PRIMARY CARCINOMA OF TUBE, WITH FIBROID UTERUS.

Mr. Bland Sutton showed a specimen, removed from a very obese married woman, who came complaining of a discharge of matter and blood in gushes from the vagina. She had had for some years a large abdominal tumour, which, under an anæsthetic, was found to lie in the hypogastrium, and appeared to be a fibroid. The uterus was much longer than normal. The diagnosis lay between a sloughing fibroid and a tumour of the endometrium. He removed the uterus and adnexa, and in the course of the operation he discovered that the left tube was twice its natural length, and passed on to the tumour, where it ended in a well-marked dilatation. This part was adherent to the peritoneal surface of the rectum. He arrived at the conclusion that it was a case of primary carcinoma of the Fallopian tube, which had protruded through the ostium and had attacked the rectum. The case suggested several interesting points. He had often been in doubt whether the disease began in the endometrium and then infected the tube, or *vice versa*. In this case it had unquestionably started in the tube. It was interesting to note that the gushes of blood must have come from the ampulla in the tube and he thought that this might be regarded as a crucial test that when there was blood in the ampulla and contraction took place it was propelled into the uterus. That was parallel with

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(*a*) Paper read before the Edinburgh Medico-Chirurgical Society, November 5th, 1902.

what they found in extra-uterine gestation. There was six inches of healthy tube between the cancer and the uterus. He called attention to the fact that many men would have dilated the uterus in the presence of hæmorrhage after the menopause, and would have been surprised to find that the endometrium was healthy. He showed the fibroid uterus, which was 4½ inches in diameter, although it was nine years after the menopause, and this he suggested might help to destroy the superstition that fibroids tended to shrink after the menopause. In reply to Dr. Handfield-Jones he said he believed that view to be purely a superstition.

Dr. **Griffith** suggested that the specimen should be referred to a committee, adding that it seemed somewhat extraordinary that in presence of a fibroid uterus the author should assume that the blood came from the tube. It was years since he himself had shown a series of specimens to prove not only the possibility, but even the probability, of this occurrence. He had never examined a case of occluded tube which did not present a well-marked dilatation of the interstitial portion, and even when this was not visible to the naked eye it was evident under the microscope. He could not understand how the "gushes" of blood could pass through the length of healthy tube that intervened.

Dr. Gow observed that there were cases in which similar tumours after the menopause caused gushes of blood from the uterus, and he thought a malignant tumour in the tube would be likely to bring about the return of hæmorrhage.

Dr. **Handfield-Jones** recalled a similar case which he had some years ago. The uterus was enlarged, and the patient was supposed to have cancer of the endometrium. After several curettings the hæmorrhage returned, so the uterus was extirpated, but when they cut it open the endometrium appeared to be quite healthy. He therefore did not think it was necessary to have recourse to such an ingenious hypothesis for an explanation of the source of the hæmorrhage in the author's case.

The **President** questioned whether it was a fibroid tumour at all, for it looked very much like a sarcoma. With respect to the disappearance of fibroids after the menopause, he mentioned that in cases under his own observation some of them had diminished in size so much that it was quite impossible to feel them, so that it was certain they did shrink, even if not to total disappearance. The blood in extra-uterine gestation might come from the tube whether it were blocked or not, but he did not think that the author had proved conclusively that it came from the tube in his case. If the carcinomatous growth had not existed the presence of the fibroid would have been held to account for the hæmorrhage from the uterus. He agreed that the specimen had better be referred to a committee.

Mr. **Bland-Sutton** agreed to the suggestion and a committee was appointed.

EXTRA-UTERINE GESTATION IN UTERINE HORN.

Mr. **Bland-Sutton** also showed a specimen removed from a woman, æt. 29, the mother of two children, the youngest being 18 months of age. In July, 1901, she ceased to menstruate and thought herself pregnant. In October she suffered much abdominal pain, followed later on by attacks of pain culminating in false labour which continued off and on for three months, accompanied by the discharge of blood from the vagina. This went on until October 3rd of this year, when she came under his observation. On examining her he came to the conclusion that there was extra-uterine pregnancy with a dead child, and that the pregnancy was possibly, as suggested by the practitioner who had sent her, in the horn of a malformed uterus. On abdominal palpation he felt a large movable tumour of a globular shape, feeling just like a pedunculated subserous fibroid. The uterus was of normal size, and he could not make out any direct connection between the two. A month ago he performed cœliotomy, and removed the tumour, which had torn through some inches of the meso-rectum. This he repaired, but there was some oozing, and he drained for thirty-six hours. She made an excellent recovery. The fœtus was enclosed in a fairly thick muscular sac together with the placenta. It was on the left side of the uterus. He was unable to find either ovary or Fallopian tube. The sac was connected to the uterus by a broad band, but he could find no clue to its nature. From the muscular character of its sac and of the pedicle, and its being very movable, he thought it was probably pregnancy in the rudimentary horn of a unicorn uterus.

He also showed another specimen of the same kind. The patient was thirty-five years of age and the mother of one child, aged seven. She became pregnant in November of last year, but had slight shows at times, and in the early months she suffered more pain than usual. Her doctor thought there was something abnormal, and sent her on for advice. On examination a small rounded tumour was detected in the left half of the pelvis, which felt like a small subserous sessile fibroid and a decision was postponed. When she returned there was no pain, and on re-examination the mass had disappeared, the uterus was in its normal position, and its size was about that to be expected. He thought he must have made a mistake. In September she had a fruitless labour, and a month later she began to menstruate again. She again returned, and he then came to the conclusion that it was an extra-uterine gestation because he could feel the fœtus lying across the uterus. He performed cœliotomy ten days later and removed the fœtus, enucleating the placenta, which was about the size of a cricket ball. It was adherent to the bowel and a portion of the amnion had to be stripped off and left *in situ*.

SPONTANEOUS DELIVERY OF INFANT IN TRANSVERSE PRESENTATION.

Dr. **Comyns Berkeley** showed a full-term fœtus sent to Mr. Doran by Mr. Miles, of Stantonbury, which had presented transversely and had undergone spontaneous delivery. The mother's age was 29. She had been confined in 1895 with placenta prævia, again in 1897 of a healthy child at term. Her last confinement commenced on October 18th. During pregnancy she had suffered a great deal from pain, and the movements of the fœtus were very feeble. The pains came on on October 11th, and Mr. Miles diagnosed a dorso-anterior position. Several fruitless attempts were made to deliver with the forceps, and later in the day spontaneous delivery took place, the fœtus being dead.

PARATUBULAR HÆMATOCELE.

Dr. **Vine Bell** showed a specimen removed from a woman, the mother of five children, last child thirteen months previously, had not menstruated since. Three months ago she lost blood *per vaginam* for a month at a time. Eleven weeks ago she was seized with severe pain associated with great increase of the hæmorrhage with clots and vomiting. The attack was repeated several times with retention of urine and dysuria. She kept her bed and recovered to some extent. Little could be made out on examination beyond a mass on the left side of the uterus the size of a billiard ball, tender to the touch. No absolute diagnosis was made, but the abdomen was opened and the specimen was removed. There was no other hæmorrhage in the abdomen. The specimen consisted of a rounded mass of clot adherent to the tube wall externally, *e.g.*, a paratubal hæmatocele.

Mr. **W. Sampson Handley** read a paper on

PARATUBAL HÆMATOCELE.

He pointed out that encysted hæmatocele, with a fibrous sac clasping the ostium, and independent of, though perhaps partially adherent to, the viscera (peritubal hæmatocele) was first described by Sänger and Taylor. It is more frequent than is commonly believed, since the sac has often been mistaken for a portion of the tube. Its capsule consists of fibrous tissue, not of fibrin. All encysted hæmatoceles arising from tubal bleeding are described by Sänger and Taylor as peritubal, and therefore, necessarily, as the result of hæmorrhage from the ostium. The object of this paper is to show that tubal rupture may produce an encysted hæmatocele adherent to the tube, and enclosing the rupture in its wall. Such a hæmatocele is not peritubal, but rather paratubal. Its sac may be mistaken for a part of the tube. These statements are chiefly based on a re-examination of specimen 2,480 in St. Thomas's Hospital Museum, removed by Dr. Cullingworth, and described in the catalogue as a sacculated hæmato-salpinx. Clinically the symptoms of the case were eleven weeks' amenorrhœa, followed by vaginal hæmorrhage and recurrent bearing-down pains during the three months which elapsed before operation. There was a soft elastic swelling in Douglas's pouch; the right appendages were absent from their normal situation; right tubal mole was diagnosed, and recovery followed operation. The specimen was reported on by a committee of this Society, but no definite opinion was expressed as to its nature. Re-examination shows a healed rupture in the wall of the tube where the blood sac is adherent to it. Muscle is absent from the wall of the blood sac, which exactly resembles the wall of a peritubal hæmatocele—that is, it consists of fibrous tissue organised from peritoneal lymph, not of fibrin. This and other evidence negatives the supposition that the wall of the tube took any share in the formation of the wall of the blood-sac. A search through the literature has supplied one example of paratubal hæmatocele in a modified form (part of the mole lay in the sac of the hæmatocele, part in the tube), and two connecting links or intermediate forms between peritubal hæmatocele and the typical paratubal hæmatocele now described. It seems probable that the slow bleeding which forms an encysted hæmatocele does not, as is generally held, precede, but goes on *pari passu* with the formation of the sac. Moreover aneurysmoid distension of the developing sac, by continuously altering its relations to the surrounding peritoneal surfaces from which it is derived, separates it from them, and accounts for the otherwise inexplicable tumour-like individuality of the hæmatocele. The original lymph thrown out round the rupture, instead of being stretched out in the form of bridles or membranes, is evenly distended into a complete spherical sac surrounding the blood. The author suggests the word dynamocele as appropriate to such a product of fluid pressure.

Dr. Eden showed a specimen removed twelve years ago at the Chelsea Hospital, consisting of the Fallopian tube, cut through about the middle with an oval blood clot attached to the upper part. This had the general characters of a tubal mole except at the outer end, where there was a little curved thread-like projection. The clot was intimately adherent to a very small part of the tube, and there the wall of the tube was very thin. He thought there had been a rupture of the tube, and that the rupture had subsequently healed. He supposed, however, that it was really a paratubal hæmatocele. He failed to find any trace of villi in the blood clot, and there was no evidence in the tubal mucosa of the occurrence of pregnancy. He pointed out that it was very difficult to exclude the presence of villi unless one examined the whole of the specimen. The small size of the rupture proved nothing, because they knew how the tube retracted after the escape of the clot.

Dr. Cullingworth observed that it was very important to have proved that in all probability a rupture of the tube could take place and a hæmatocele form, followed by the closure of the laceration.

Mr. Bland-Sutton pointed out that the mole might not be larger than a pea, so that in a case of this sort there may have been a small mole which escaped detection. He had seen them form around fluid effused into the tube in acute salpingitis. Some years ago he had published a very perfect case of the kind, and there was no blood in the tube at all, only clear fluid. They must therefore look for something beyond blood-clot to account for them. He observed that if they put a piece of gauze into the abdominal cavity to drain it, and noticed what a large quantity of lymph and organised lymph collected in and around the gauze they could easily account for the appearance outside the tube. The author's object, he imagined, was to prove that these cyst-like bodies might form elsewhere than round the fimbriæ. They might, however, form around accessory ostia.

Dr. Griffith said it would simplify matters if they used one term to cover both conditions. The contents were the same wherever it formed, whether along the tube or at the ostium. Intra-uterine fibrinous polypi presented certain points of resemblance with this condition. In any event the term "paratubal" should not be used.

The President agreed that the term "paratubal" was unsuitable. It must be a slow formation and probably first of all the peritoneum was intact and gave way later, but not until there had been coagulation and the formation of a well-defined clot. This might explain why the blood did not flow freely into the peritoneal cavity.

Dr. W. S. Handley, in reply, suggested that floating appendicular abscess was probably of the same nature, and he was on the look out for some to examine. He pointed out that the pressure of the peritoneum would not explain its production, because the same thing occurred at the ostium. He aslo suggested that questions of nomenclature ought to be dealt with by the Society as an official body oftener than was done.

THE BRITISH LARYNGOLOGICAL, RHINOLOGICAL, AND OTOLOGICAL ASSOCIATION.

The Annual General Meeting was held on Friday, Nov. 7th, 1902, at the Medical Society's Rooms, 11, Chandos Street, Cavendish Square, W.

The President, Dr. John Macintyre, of Glasgow, in the Chair.

After the minutes of the last meeting had been read by the Secretary, and approved and adopted by the Fellows present, the election of the following officers for the ensuing year took place:—President: Dr. Wyatt Wingrave. Vice-Presidents: Dr. Hillis (Dublin), Mr. Bark (Liverpool), Dr. Robert Woods (Dublin). Council: Dr. Macintyre (*ex-off.*); Metropolitan: Dr. Kelson, Mr. Claude Woakes, Mr. Atwood Thorne, Dr. Hawthorne; Extra-Metropolitan: Dr. Scatliff (Brighton), Dr. Fullerton (Glasgow). Hon. Secretaries: Mr. Chichele Nourse, Dr. P. H. Abercrombie.

Before vacating the chair Dr. Macintyre, the retiring President, expressed his sense of the great loss they had sustained by the death of Mr. Lennox Browne, who had always worked hard to further the interest of the Association.

On taking the presidential chair Dr. Wyatt Wingrave moved that a suitable letter of condolence be sent to Mrs. Lennox Browne. This was seconded by Mr. Mayo Collier, and it was unanimously agreed to forward to Mrs. Lennox Browne a suitable letter of condolence.

The following Clinical Cases were then shown:—

A case of foreign body (a penny) in the œsophagus, located at once by the X-rays, and which had escaped detection by bougies, &c. Shown by Dr. Macintyre The X-ray photograph was shown by means of the stereoscope, and the penny was exhibited much corroded.

A case of malignant growth in the larynx, by Mr. Mayo Collier.

A case of myxo-sarcoma in the nasal cavity, by Mr. Mayo Collier. Opinions of the Fellows were invited as to what procedure should be adopted in the way of treatment in this case.

Mr. Bark spoke of a similar case of his own where he removed the growth with snare and forceps, and it returned in a fortnight. He then excised the upper jaw, and again it returned. He thought it was a very difficult question to decide what to do in these cases. Perhaps in this particular case the upper jaw might be removed.

Mr. Stuart-Low was against any severe operation unless in the very early stage, and he referred to a case where, at the operation of excision of the upper jaw, it was found impossible to remove all the disease.

Dr. Macintyre thought it was impossible in this case to remove all the disease, and he spoke of the very great success he had had in a similar case, where he used the electrical treatment, details of which he had given at a former meeting.

Dr. Jobson Horne thought it was very desirable in such cases to have a microscopical preparation of the growth.

The President remarked that the microscopical evidence in such cases was at times conflicting. What apparently was true sarcoma microscopically sometimes was innocent clinically. He requested that a slide be shown at the next meeting.

Mr. Mayo Collier, replying, said he did not intend to operate on his patient as he believed the whole growth could not be removed, the cribriform plate being already, in his opinion, involved.

A case of displacement of the nose, by Mr. Mayo Collier. This patient had been operated on, and with excellent results.

Mr. Bark and Dr. Macintyre congratulated Mr. Mayo Collier on the good result of his treatment, and thought that still further improvement would take place.

A case of wandering rash on the tongue, by Mr. Mayo Collier.

A case of nævus of the palate, fauces, tongue and epiglottis, by Dr. P. H. Abercrombie.

A case of pachydermia laryngis, by Dr. Wingrave.

Mr. Mayo Collier was inclined to regard the case as one of laryngitis due to alcohol or syphilis.

Dr. Jobson Horne advised against local treatment, and was in favour of rest of the voice and general hygienic measures.

A case of hyperacusis, by Dr. Wingrave.

A case of new growth of the epiglottis, by Dr. Jobson Horne.

Mr. Mayo Collier regarded it as a case of syphilis, and advised suitable treatment.

Dr. Kelson thought it might be a tuberculous mass.

Dr. Wingrave expressed some doubt as to the origin of the growth being in the epiglottis. It was a case difficult to diagnose clinically, and he advised the removal of a piece for microscopical examination.

Dr. Jobson Horne said he would have this done, and if tubercle were disproved he would at once begin thorough anti-syphilitic treatment. He himself was inclined to regard the case as an unusual form of lupus.

A case of fixation of right vocal cord, by Dr. Jobson Horne.

Dr. Kelson thought this was due to epithelioma at the juncture of the larynx and œsophagus, as there was an enlarged gland present, and some dysphagia.

Mr. Stuart-Low showed an "anatomical" tonsillotome, and an improved stilletted Eustachian catheter.

The Presidential Address on "Tobacco in Nerve-Deafness" was postponed until the next meeting.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Meeting held November 5th, 1902.

Sir Thomas Fraser, President, in the Chair.

Dr. Byrom Bramwell showed cases of tabes, multiple sclerosis, and syringomyelia treated by Frenkel's plan of co-ordinated muscular exercises. The first case was a married woman, suffering from the symptoms of locomotor ataxia, who could not walk on account of the inco-ordination. She had been confined entirely to bed for five months at the date of the commencement of the treatment. Within three weeks of the time she began the exercises she could walk in a go-cart, and five months later could get about fairly easily with the aid of two sticks. The second case was one of disseminated sclerosis in a young woman who had been under observation for two years, and showed all the characteristic signs of the disease. She had been bedridden for three months, but after treatment on Frenkel's plan could walk with the aid of a stick. The third patient was a woman, æt. 21, who was admitted to hospital six weeks before. She had been unable to walk for five months, and presented signs of spastic paralysis of the legs, paresis of the upper limbs, with atrophy of the muscles of the hands and shoulder girdle. There was well-marked dissociation of sensation over the arms and front of the chest, ordinary sensibility being retained, while that for heat, cold, and pain was lost. Below these levels only tactile sensibility was impaired. This patient could also walk now, as a result of Frenkel's exercises. Dr. Bramwell did not wish to lay too much stress on the effect of this line of treatment except in tabes, in which it was undoubtedly very beneficial; in disseminated sclerosis remissions were notoriously common; still, he thought that the exercises had produced benefit in the patients suffering from this disease and from syringomyelia.

Dr. F. D. Boyd showed (for Dr. Gibson) (1) A case of acromegaly. The patient was a woman who had first begun to suffer from headache five years ago, and subsequently noticed that her hands and feet were becoming larger. The face showed the characteristic elongation, from increase in size of the maxillæ, there was optic neuritis, but no hemianopsia, and the state of the thyroid was doubtful, but the gland was probably atrophied. (2) A case of pseudo-hypertrophic paralysis. Three brothers and a sister of the patient had died of some acute cerebral affection. The calves and triceps muscles were enlarged, while the muscles of the shoulder girdle and the adductors of the legs and extensors of the feet were atrophied.

Mr. Alexis Thomson showed a boy, æt. 16, who, after a crush between buffers developed a traumatic cyst of the pancreas. When admitted to hospital a tense cystic swelling was found lying above the umbilicus, and on opening the abdomen it was seen that it was due to a collection of fluid in the lesser sac of the peritoneum. Above it lay the stomach, and below it the transverse colon. After the sac was opened and drained, the left lobe of the liver was raised, when it was found that a perforation of the stomach had occurred at the time of injury and that this had been closed by the adhesion of liver to the gastric wall. The closure of this perforation was a matter of some difficulty, and was effected by replacing and suturing the lobe of the liver which had been disturbed. The cyst was opened into by tearing through the meso-colon, and three or four pints of brownish fluid were removed.

Mr. H. J. Stiles showed (1) A girl, æt. 4, showing the very rare congenital deformity of umbilical urinary fistula. The parents were first cousins, and another child had supernumerary digits. (2) A case of spina bifida and hydrocephalus. (3) A case of recovery after operation for tuberculous disease of the temporal bone. The disease of the bone was so extensive as to make the case seem very hopeless; there was, in addition, a large mass of glands on the same side of the neck. The greater part of the temporal was removed, the structures in the inner and middle ear being exposed in so doing, and the wound had cicatrised. The child was so healthy now that he proposed removing the glands. It was advisable in such cases first to deal with the caries of the temporal, and subsequently to treat the glands.

Mr. C. W. Cathcart showed (1) A patient after trephining for severe fracture of the skull, the symptoms on admission being unconsciousness, œdema of the left side of the scalp, rigidity of the right leg, and dilatation of the left pupil. After the operation there had been a great deal of mental aberration, lasting for about three weeks, but the patient ultimately made a perfect recovery. (2) The result after operation for an unusually large cholesteatoma of the temporal. The cavity in the bone after the tumour was removed was such that a small pigeon's egg could be inserted into it.

Dr. Chalmers Watson exhibited a series of photographs illustrating some clinical and pathological appearances of chronic disease of the nervous system in horses.

Card Specimens.

By Dr. Harvey Littlejohn: (1) Two cases of fracture of the sternum, with rupture of the heart, produced by direct violence. (2) Suicidal stab wound of the heart, produced by a pair of scissors. (3) Hæmorrhage into the cerebellum, causing sudden death in a boy, æt. 18

By Dr. Alexander Bruce: Dissecting aneurysm of aorta.

By Mr. Caird: (1) Large gall-stone removed from the gall bladder of female, æt. 65. (2) Parts removed after excision and end-to-end suture in a case of malignant stricture of the colon (ascending colon, ileum, and cæcum), and showing also the ileo-cæcal valve and valve of Gersuny. (3) Prostate removed after the method of Freyer.

By Mr. C. W. Cathcart: (1) Sarcoma of femur. (2) Bullet lodged in lumbar vertebræ. (3) Tumour of soft palate.

Dr. W. Allan Jamieson read a paper on "Two Cases of Mycosis fungoides," which will be found on page 517.

Dr. Norman Walker alluded to the great difficulty which sometimes attended the diagnosis of very late syphilitic lesions, and pointed out that these are very much less amenable to iodide of potash than the ordinary earlier tertiaries. He thought it had not been sufficiently emphasised that mycosis fungoides was invariably fatal, and he himself had given a very gloomy prognosis about two years ago in the second of these cases. The very striking improvement after exposure to the Röntgen rays was, therefore, of great importance. Only two cases had, so far as he knew, been treated in this way, and both of these had shown very marked benefit.

Dr. Jamieson's paper was illustrated by drawings and microscopic specimens.

Dr. Aitchison Robertson read a paper on

CONTRIBUTIONS TO THE STUDY OF THE LOCAL DISTRIBUTION OF CANCER IN SCOTLAND.

The communication, he said, was chiefly designed to draw the attention of the medical profession to the importance of the subject. The reason for undertaking the work was that no studies of the kind had hitherto been attempted in Scotland, although similar investigations were being pursued in the Midlands, in Germany, and in America. According to the Registrar General's statistics the mortality varies greatly in the different counties, and one of his objects was to see how far the ordinary topographical characteristics of these counties agreed with those of other localities in which cancer was correspondingly common. There was a consensus of opinion that, making all allowance for improved diagnosis rendering death certification more accurate, cancer was slightly on the increase. Sir William Banks had pointed out that the diagnosis of cancer was as easily made forty years ago as it is to-day, and probably the improved certification was not enough to account for the increased mortality. Cancer maps, showing the distribution of the mortality, were less useful when applied to Scotland than to other countries on account of the distribution of the population between large, comparatively sparsely populated rural districts and a few large towns. In the latter the presence of hospitals vitiated the statistics to a great extent. He had taken the Registrar-General's statistics for the years 1895-6-7, and had endeavoured to correct them as regards the actual residences of cancer patients by a system of inquiries among practitioners in all parts of Scotland, and by the investigation of hospital registers. Even in the last named the causes of death were very loosely stated, and still more so in the ordinary death certificate, as was shown by the fact that in 1895 no less than 600 deaths had been transferred from other heads to that of cancer as a result of special letters of inquiry sent out by the Registrar-General. From his corrected data he had prepared a map for comparison with one based on the Registrar-General's figures. The average mortality from cancer was about four, and the general result of the corrections was to lower the mortality in towns and to raise that of rural districts. In the Registrar-General's returns the towns, on account of the existence of large hospitals, showed a high cancer mortality. Dr. Aitchison then took up some of the alleged causes of cancer—geological formation, topography, humidity as regards soil and rainfall—and found that none of these could explain the cancer distribution in Scotland. Neither was there any evidence that a special food habit, such as fish eating, alcohol, &c., had any influence. He thought there was a clear case for the appointment of a committee of investigation of the distribution of cancer, and that it was most important that great attention should be paid to local details of its incidence, and that the cases arising in groups in different localities should be studied with a minuteness which had been impossible to him.

Dr. Macmillan alluded to the comparative frequency of cancer in certain parts of Arran. Dr. Harvey Littlejohn thought that any possibility of cancer being due to the geological or topographical nature of a locality might be dismissed. Had any such connection existed it would have been discovered long ago. His only conclusion on Dr. Aitchison Robertson's paper was that the mortality was not corrected for age, and he suggested that the different age distribution of the population of the towns and of the country required consideration in determining whether cancer was actually more frequent in one than in the other. Dr. Bashford, the newly appointed superintendent of the cancer research laboratory, Dr. Walker, and the President also spoke.

Dr. Dawson Turner read a paper on "The Treatment of Cancer by Photo-Therapy," which we publish in abstract elsewhere.

France.

[FROM OUR OWN CORRESPONDENT.]

Paris, Nov. 9th, 1902.

Appendicitis.

The subject of appendicitis is inexhaustible; it crops up at almost every surgical congress and every meeting of the Société Chirurgical. This time the question of expectancy was discussed by M. Segond, who considered that many fatal cases were due to hesitation on the part of surgeons to operate. He related the facts of a case in point. A young woman, who had suffered for several months from hepatic colic, was suddenly seized with sharp pain in the right iliac fossa. It was only forty-eight hours afterwards that perforation of the appendix followed by general peritonitis was recognised. In spite of the extreme gravity of the situation the speaker performed laparotomy as the only chance of saving the patient. The appendix was found to be gangrened. Death took place three days following. He was convinced that the woman would have recovered if she had been operated on at an early period, for he had seen several patients with gangrene of the appendix get well when operated on within the first few hours. He believed that the time had arrived to publish all cases of death due to temporisation, for there existed in the systematic application of that method a danger which should be denounced.

Tetanus.

M. Claude communicated the case of a man, æt. 46, who, five days after a very slight wound on the little finger of the left hand, was seized with intense general contractions, fever, delirium, &c. An injection of antitetanic serum was immediately given, and each day following an injection of four grains of phenic acid, according to the method of Baccelli. Besides this treatment, blood-letting was practised, chloral given in large doses, and the offending member amputated. For several days the patient had in no wise improved, but finally the fever declined, tetanic symptoms disappeared, and finally the cure was effective.

M. Chauffard related another case treated in the same way, but the results were not so fortunate. A man while drunk, was struck on the head by an iron instrument. He fell to the ground and the wound was soiled by the dust. Six days afterwards, signs of tetanus set in. He was given an injection of serum two days in succession, and besides, four injections containing one grain each of phenic acid. An enema of chloral was also given. The man succumbed, however, the following day. The speaker was inclined to think that the amount of phenic acid might have been considerably increased as Baccelli recommends from five to eight grains in the twenty-four hours.

M. Vallas said that, in spite of five unsuccessful cases which had been published, the preventive value of anti-tetanic serum was fully proved, and, if the method were applied to every person that was wounded, tetanus would disappear from human pathology. Unfortunately that ideal was impossible to attain, as tetanus was too rare for it to be generally accepted, yet the preventive treatment was formally indicated in cases of contused and lacerated wounds soiled with earth or other *debris*. Ten grammes of the serum should be injected on the first day, again on the third day, and finally on the fifteenth day; and if the wound did not show disposition to heal, and especially if local complications existed susceptible of favouring the vegetation of the bacilli of Nicolaïer, it would be prudent to renew the preventive injection every fortnight.

When the tetanus was declared, we should admit ourselves disarmed. However, serotherapy constituted even at that moment an important resource. The injections have been made subcutaneously, intracerebral, intravenous, and under the arachnoid. Intracerebral injections had the enormous disadvantage of being far from inoffensive. Whereas but slight accidents had been caused by the subcutaneous or intravenous methods, the cases were not rare where the intracerebral injection had caused the death of the patient. That method should consequently be rejected absolutely. The same may be said of the subarachnoid method.

He had been able to collect 373 cases of tetanus treated by subcutaneous injections of the serum, with 145 deaths and 228 cures, or a mortality of 39 per cent. By the old treatment the mortality was 70 per cent., consequently it was evident that serotherapy had lowered the mortality considerably.

Chloral by the mouth or by enemas, and hypodermic injections of phenic acid constituted symptomatic treatment and were given to act on the contractions; they should only be regarded as auxiliary means, but it was well to utilise them at the same time as the serum.

Hydrocele.

Chloride of zinc, gr. xv.;
Water, ℥ijss.

After removing one or two ounces of the liquid, according to the size of the tumour, inject five to twenty drops of the caustic solution by means of an ordinary hypodermic syringe. A rapid cure follows without causing the slightest complication.

Germany.

[From our own Correspondent.]

Berlin, November 8th, 1902.

Cancer Literature.

The *D. Med. Zeit.* is devoting a series of supplements to this important subject, in order that its readers may be in a position to know all that is written about it throughout "the civilised world."

The first reference is to an article by Carl Kolb on the spread of malignant new growths in South Germany. The most important outcome of the article is that the highest mortality is found in a continuous stretch of country, bounded on the north by the Danube and the Jura, and on the south by the Alps, and extends from Vienna over the high plateau of Bavaria and Swabia to Geneva. This region corresponds almost exactly to the tertiary formation with diluvium, and is distinguished by the physical and chemical properties of the soil, where there are depressions, shallow valleys, peaty and swampy spots, and extensive clay soils. Some features point to a parasitic origin, such as local differences of frequency, local and house epidemics, temporary variations in frequency.

Riechelmann gives some statistics from a pathological point of view. During the period 1895 to 1901 there were 711 autopsies in the Friedrichshain Hospital, Berlin, on cancer cases. In a large number (nearly one-fourth) the disease was not recognised during life. The tables given are too extensive for reproduction here, but some of the facts are of special interest. Out of 288 cases of cancer of the stomach a connection between the cancer and ulcer of the organ was shown only in fifteen cases. In thirty-nine cases of malignant disease of the gall bladder biliary calculi were found in twenty-six of them, nearly in two-thirds of the cases. As regards cachexia, he finds this essentially dependent of the site of the disease in the intestinal tract, the ulceration of the tumour and metastasis. In conclusion the connection is given between the primary growth and the metastasis, in which some very instructive material for the investigation is to be found.

As English literature on the subject is accessible to all, the papers of Foulerton and Hillier may be passed over with bare mention.

J. Jensen, Copenhagen, relates some experiments with cancer tumours. He found, as did Moran, that adeno-carcinoma could be communicated to white mice, and from them to others in lengthened series. The tumour mass was indurated with physiological solution and injected. In the course of months a distinct tumour develops, which proved to be typical carcinoma. If the cells were destroyed by induration with Kieselguhr no cancer development followed, but then vitality was not destroyed by keeping the cancer tissues four days in the ice chest. Attempts to transfer the disease to rabbits, guinea pigs, and white rats failed. Like other investigators, he endeavoured to discover a curative serum. He injected tumour material into rabbits, and with the serum of these animals treated mice who had already developed malignant tumours. In those with small tumours complete resorption took place, in those with large ones decomposition of the tumours and rapidly fatal cachexia. Control experiments showed the complete absence of any influence in normal rabbit serum. The writer believes therefore that the serum of rabbits previously treated has a specific effect on the disease.

E. von Leyden and F. Blumenthal publish a preliminary contribution on some results of investigation. Their attempts at transference of the disease to animals were all without result; but cancer in the dog was repeatedly transferred to other dogs. Experiments on the production of a curative serum were made by injecting the cancer serum of dogs into rabbits for several weeks together. A cancerous dog was then injected with this serum. After some time softening and liquidation of the growth took place, and after several weeks complete disappearance of the tumour.

In a second dog with carcinoma recti (two tumours the size of a plum) fresh tumour juice from another dog was injected. Both tumours disappeared in the course of five months, except a small residuum.

Similar experiments were then made on the human subject. A woman, æt. 56, with cancer of the bladder, was injected with human cancer juice. The cancer cells previously present in the urine disappeared and the nutrition improved. The woman died some time after of cardiac weakness, and the autopsy showed that the bladder tumour, at first the size of an apple, had shrunk materially, and that the affected lymph glands had become normal.

Another woman, with carcinoma uteri, was treated for months with human cancer juice. At the autopsy no metastases were found.

Another woman, æt. 42, with cancer of the uterus, was treated for some weeks with serum from a goat that had previously had tumour extract injected; later on the tumour extract was injected direct. The tumour appeared in part to undergo some decomposition. Although recovery did not take place, a material improvement took place in the general condition. V. Leyden sees in Jensen's experiments related above a firm experimental basis for further investigation. Korbsch, *Neue Med. Presse*, proceeds from the fact that cancer is exceptional under twenty, and assumes therefore that youth affords a protection against the disease. Sheep also are exceptionally free from the disease, so he wasled to treat cases with mutton serum from freshly-killed animals. They were treated for months together with from 30 to 50 grammes of serum daily either by mouth or subcutaneously.

The cancerous cachexia improved slowly, a fresh appearance was put on, the blood vessels filled, and the cancerous tissues were destroyed.

Carcinomata of the surface decomposed and cicatrised in part; in others residual parts of tumours remained behind that defied all treatment, but the author believes that if a method could be made use of by which larger amounts of serum could be incorporated better results might be obtained. Unfortunately, more than 50 grammes could not be given per diem as fever was set up. He hopes that drying of the serum *in vacuo* would permit of curative doses being given.

Austria.

[FROM OUR OWN CORRESPONDENT.]

VIENNA, November 8th, 1902.

LABYRINTH ANOMALY.

AT the "Gesellschaft der Ærzte," Alexander, in conjunction with Professor Kreidl, gave an account of their experiments with deaf cats and Japanese dancing mice.

The congenitally deaf cat is insensible to loud sounds but sensible to the cyclostat, which proves that the vestibular apparatus is intact. The post-mortem examination showed an absence of mucous membrane in the cochlea as well as of the corti apparatus, with degeneration in the sacculi of the ampullæ. The labyrinthal pigment was absent in many places and greatly reduced in others.

In the Japanese dancing mice, which have been cultivated for the last hundred years, there was a similar absence of many of the parts without any reaction with the cyclostat, whilst there was a normal reaction to the galvanic current.

Histological examination showed an atrophied condition of the spiral ganglia and cochlear nerve fibres, as well as of the vestibular ganglia. There was also marked defect in the neuro-epithelium of the nerve endings.

The changes in these dancing animals are congenital, and are carefully selected for propagation owing to the amusement they give by their gyrating freaks that have earned for them the name of "dancing mice." Alexander concluded by saying that he had not yet examined the intra-uterine state of these animals.

"DECOLLEMENT TRAUMATIQUE."

Fuchsig showed a case of "decollement traumatique," the patient being a woman who had been crushed between two wagons, detaching both trochanters. Gradually after this injury a tumour began to form in the right groin of an irregular shape and soft consistence, which, from the amount of lymph effused, appeared to arise from the superficial fascia. Effusion of blood in the fascia of the abdomen is an unusual condition, and was not explained till the investigations of Morel-Levalée put it beyond doubt. Since that time Gussenbauer and Köhler have confirmed the opinion that the tissues are temporarily paralysed by severe pressure which may not have gone so far as to produce a visible solution of continuity, yet the structure has been so weakened and the contractile power so lowered, that the tissue becomes spongy and unable by its own resistance to expel the fluid.

Being a case of disturbed sensibility the proper mode of treatment would be puncture, incision, or injections of irritating lotions.

ANATOMICAL PATHOLOGY OF THE GALL DUCTS AND PANCREAS.

At the "Naturforscher" Bunger gave an anatomical lecture on the relation of the gall ducts to the pancreas and the importance in the surgery of the parts. It was not enough to remove the stone from the choledochus of the patient, but also from the whole length and smaller ramifications if possible. To determine the exact course of the duct he carefully examined 58 dead bodies, and found that in 25 per cent. of the cases the choledochus ran through the pancreas, while in 5 per cent. only did it run through the head of that viscus, having to be divided at least two centimetres away. The pancreas in every case was firmly adherent to the duct. The choledochus and Warsung's duct were in combination in only 2 per cent., and in 98 per cent. passed separately into the duodenum at 0·2 centimetre distance. Warsung's duct was also free in its whole course, crossing and recrossing the ductus choledochus except in 10 per cent.

The practical lesson to be deduced for the surgeon is, that the choledochus may be opened in its whole length, except in the part near its entrance into the duodenum, without seriously wounding the pancreas. Unless the head of the pancreas be very large, or some other morbid change of the pancreas be suspected to be giving rise to compression of the ductus choledochus it need not be opened. In such a case the symptoms would point to a lesion in the pancreas in addition to the gall-stone.

Another point should be borne in mind, viz., that the two ducts open separately into the duodenum, and must be carefully repaired if wounded, as the secretions are conducted separately into the duodenum. If catarrh of the duodenum causes a swelling of the papilla duodenalis, the secretion will be retained in the ampulla, and a calculus form, not only in the ductus choledochus but also in the pancreatic duct, which may also be produced by a misplacement of Warsung's duct.

Stolz said the principal cause of gall-stones was either blocking up of the biliary canals or infection. In the majority of the cases he had examined he had not found any new stones forming. He was strongly of opinion that no attempt to dissolve these contents was likely to be attended by success.

The Operating Theatres.

CANCER HOSPITAL.

Large Broad Ligament Tumour.—Mr. Bowreman Jessett operated on a married woman, æt. 52, who had been admitted for a large abdominal tumour. Her father had died of tumour of the brain. About seven years ago the patient noticed a lump in the abdomen, which gradually got larger. No treatment was resorted to. On admission two distinct lumps were felt on the upper part of the abdomen, over which there was a dull percussion note; there was no fluctuation. These lumps appeared to be connected with another hard mass extending into the pelvis. A further tumour was felt just above the pelvic lesion on the left side. *Per vaginam* the cervix was found pressed firmly against the vaginal wall anteriorly, there being a solid tumour at the back of the cervix, pushing it forward. The patient had frequent desire to micturate; menstruation was regular, lasting three to four days; there was no metrorrhagia. Under ether Mr. Jessett cut down and found a large fibroid extending up to the ensiform cartilage. The tumour had a large mass on the left side imbedded in the left broad ligament, which last was stretched completely over the tumour, extending considerably above the umbilicus. Numerous very large distended veins were stretched over the tumour. Strong adhesions bound the whole down in the pelvis; these were separated with considerable difficulty. Mr. Jessett then introduced Doyen's myoma screw into the posterior part of the tumour, and drew it forward through the abdominal wound. The capsule enclosing the tumour was divided round after being ligatured in sections and, after the hand had been passed down, was separated from the tumour itself, which was then delivered. The uterine arteries were secured, and the cervix uteri divided. The broad ligament on the opposite side was ligatured, the vessels secured, and the entire mass removed. The patient was kept in the Trendelenburg position during the operation. The tumour weighed 12 lbs. 13 ozs. During the latter part of the operation when the capsule was being peeled off, the left ureter was discovered running across the upper and anterior surface of the projecting mass of the tumour. The ureter was completely buried in a mass of adhesions and had been evidently ligatured and divided with them at the earlier stage of the operation. It was not discovered that the structure had been cut until the latter part of the operation. Most careful search was made for the upper end, but it could not be found, and as it had undoubtedly been ligatured and the patient was considerably collapsed, the search for it was abandoned, the lower end was freed from the tumour and ligatured, and about six inches of it removed. The ureter had been very much stretched over the tumour and the upper end must have contracted very considerably. Mr. Jessett said the interest of this case consisted in the first place in the size of the tumour situated entirely in the broad ligament, extending as it did up to the cartilages of the ribs on the left side, but causing comparatively few symptoms beyond the inconvenience of so large a mass being present. Secondly, in the fact of the ureter having been stretched completely over the top and front of the tumour, and imbedded in adhesions, so that it was not discovered until quite late in the operation, when the patient being in such a condition that it was thought inadmissible to subject her to further operative proceedings. Had the upper end of the ureter been discovered, Mr. Jessett pointed out that he would certainly have united it with the lower end by invaginating the upper into the lower by means of either splitting the lower end or by adopting the method suggested by Maunsell for uniting intestine. When it was found impossible to discover the upper end he said the question arose of removing the left kidney, but the patient's condition forbade this, and it was hoped that the ureter having been ligatured, hydronephrosis would naturally follow, but that the kidney eventually would become atrophied.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 12, 1902.

INFANT LIFE PROTECTION.

The talented author of "The Invisible Man" and other remarkable romances, who recently showed himself the prophetic essayist in "Anticipations," has now turned sociological teacher, and in the October number of the *Fortnightly Review* deals with the prosaic subject of "The Problem of the Birth Supply" in a manner at once critical and suggestive. Mr. H. G. Wells shows us that every minute seven new citizens are born into the great English-speaking community which is scattered under various flags and governments throughout the world. The question awaiting a satisfactory answer is: How may the quality of the average birth be raised? There are many fallacies in the popular answer, which vaguely advises, in ambiguous phrase, "the survival of the fittest." But it is not with Mr. Wells's "Mankind in the Making" that we are concerned at the present moment. As a preliminary to any such criticism it is necessary to face some of the ugly facts regarding the present situation as regards infant life mortality. Dr. Milson Rhodes recently showed that the present mortality of infants under one year of age was to-day as high as it was fifty years ago. The year 1900 afforded the highest mortality rate on record, 163 per 1,000. The Registrar-General's report for 1900 states that of 927,062 children born, no less than 142,912 were dead before the age of one year was reached. Truly, it is somewhat ludicrous to talk of the children of to-day being "the men of to-morrow" with a mortality like this. It is interesting to note the great variation which occurs in the different counties. In Wiltshire, Dorset, and Rutland the infant mortality is less than 100 per 1,000 births; in the last-named county the ratio is as low as seventy-nine, comparing most favourably with the average of 154 for England and Wales. But in the county of London the mortality is 160, and other counties are higher: Stafford 178, Warwick 175, Nottingham 176, East Riding of York 179, and Lancashire 180. Dr. Rhodes seeks to show that where there is what he calls marked "illiteracy" among the married women, there a high rate of infant mortality exists. Another fact is clearly elicited, namely, that the counties with the highest mortality are those where the people are principally employed in mining or manufacturing. Miss Frances Zanetti, whose work as inspector in Manchester is well known, in a recent paper has clearly indicated the chief etiological factors in the "slaughter of the innocents." "A large proportion of mothers have absolutely no knowledge of the proper way of bringing up their families. They feed and clothe their children improperly, and neglect the most elementary sanitary precautions, thereby making their homes veritable hothouses for disease germs of all kinds. Young babies are fed on bread and starchy foods, and in many cases have in addition exactly the same diet as the rest of the family, including bacon, potatoes, currant buns, stewed tea, and even beer! They drink cheap condensed milk and water out of filthy long-tubed bottles, are frequently left unwashed until late in the day, are exposed to the broiling sun in the summer and to the cold winds of winter and spring, and when they are not stifling in stuffy, dirty kitchens, are probably lying close to ashpits, or to street drains blocked with filth." The picture is true to life. Indeed, the wonder is that so many survive the rough weather of infancy. It is interesting to know that after nearly five years' experience the advantages of the Infant Life Protection Act of 1897 have been amply demonstrated. The chief object of the Act provides that: "Every person receiving or maintaining for hire or reward more than one infant under five years of age, or adopting an infant under two years of age for a lump sum paid down, and not exceeding £20, shall, within forty-eight hours, notify the fact to the local authority, and give the name and address of the person from whom they received the children." Dr. Kelynack, at the recent International Congress for the Welfare and Protection of Children, advocated an extension of the Act, the abolition of the distinction made in the present Act between one and more than one infant, and the abolition of the distinction made as regards cases received for nursing where a sum of money was paid down. Objections have been raised to the inclusion of one-child nurse cases being brought within the protecting arm of the law, but by such an amendment of the present Act there can be but little doubt incalculable good both to the mother and child would accrue. Mrs. Tennant, in Professor Oliver's admirable new work on "Dangerous Trades," indicates the dangers arising from the present system of employing young women in factories. In only too many instances the neglected infant of the one generation becomes the neglecting mother of the next. "For the girl-children full escape seems impossible. Victims in their ignorance of home, they become vehicles to perpetuate the system; without knowledge of the sacred, the helpful, even the elementary elements of home life, they in their turn, in their own married life, seek mill employment as did their mothers before them. It is, in fact, the only occupation they know. Baking, washing, sewing, are dead arts; and in these, children of mothers to a grievous extent denaturalised towards their offspring, the deepest forces of Nature seem asleep. So from generation to generation the service of the mother to her child is entrusted to a stranger, whose introduction as substitute housewife, substitute mother, is not without its cost. The net gain is sometimes in money—a few shillings; in influence and training there is always a loss." The protection of infant life is a matter of the highest national importance. Various aspects of the subject are referred to in the papers we have mentioned, and those of our readers who are interested in this interesting and most practical branch of sociological work would do well to peruse them.

FIRE RISKS AND THEIR PREVENTION.

The preservation of life and property against the risks of fire is clearly one of the most important of municipal duties. As we have previously pointed out in the columns of the Medical Press and Circular, the question is one of peculiar interest to the medical profession by reason of the numbers of helpless patients who are brought together in our sick hospitals and infirmaries. It is terrible to think what would be the result should a great fire break out in any large institution of the kind in the United Kingdom. There are various ways of minimising the spread of fire in a building, such as the use of fire-resisting materials, a proper construction and the provision of exits available for all parts and all levels of the structure. The recent coroner's inquiry into a fatal fire in the City of London, an occurrence in which six or seven lives were lost in broad daylight, as the result of a comparatively insignificant fire in the heart of the City, showed on evidence that the fire escape first brought to the scene of the fire on that occasion failed to reach an ordinary fifth floor, under sixty feet in height. Had the escape reached that window it is absolutely certain that some, if not all, of the unfortunate victims would have been rescued. A long fire ladder or escape was ultimately brought and two persons were rescued by its means. It is therefore incontrovertible that the loss of life was mainly due to the want of a fire escape long enough to reach a fifth-floor window. An important fire station lay about a hundred yards from the fire, but it possessed only a short escape. For years the inadequacy of that fire station to the needs of the district had been notorious, and had formed frequent subject of comment and debate, but the fact remains that the station stands now at the present moment just where it did a dozen years ago in point of size and efficiency. Under such circumstances the failure of the London County Council as the central fire authority of the Metropolis to provide adequate life-saving appliances and organisation seems to be fairly well established. With their alleged similar failure in their fire-extinguishing function we are not here concerned, although the enormous advance in fire insurance rates of recent years affords some indication of the way the wind is blowing. Under these circumstances the report of the London County Council, which is the fire authority of the Metropolis, dealing with the recent fatal fire, has been looked for with an unusual amount of interest. The result has been somewhat remarkable. A report has been issued by the Council, not only exonerating everyone all round from blame, but actually exalting the efficiency of the Brigade and of all appertaining thereto. The report, in short, is adulatory as well as whitewashing. It is of that order that is so sensitive of criticism that it expresses its resentment by proving that black is white, and that the defence is not only blameless but aggressively virtuous. As a matter of fact, it is the last type of documentary defence we should have expected from an enlightened and progressive body such as the London County Council. By its extreme attitude it is far more likely to lower the popular estimate of the candour of the Council. No amount of whitewashing casuistry on the part of a responsible committee will persuade the public that the fire-escape at Queen Victoria Street should not have been long enough to reach a fifth-floor window, or that it is right that the premiums on City property should have advanced 50 or 100 per cent. within a few years. It would be far wiser for the County Council to acknowledge their imperfections and to promise better things in future than to attempt to defend the indefensible with specious reports.

BOVINE TUBERCULOSIS.

Professor Koch has once more asserted his belief in the innocuousness of bovine tuberculosis to the human being. Few men are better entitled to a patient hearing on the subject than the distinguished scientist, and he is all the more deserving of consideration from the fact that his view on the question is not the popular one. Briefly stated, Dr. Koch does not base his argument so much on bacteriological grounds as on that of common experience. It is common knowledge that cattle in the state of domestication are very subject to tuberculous disease, and that in them the disease tends to become generally disseminated—bone, muscle, and gland tissue, all suffer, and the majority of cattle in herds, even under most favourable conditions, become infected with the disease to a greater or less extent. The flesh is eaten and the milk drunk of such animals without any marked evidence of its transmitting the disease. There is not, however, perfect immunity to the user of the milk or flesh; nor does Koch claim absolute immunity, for he states that he has collected twenty-eight cases of transmission of the disease to man. The danger of human infection is, probably, greatest when the udder of milch cows is affected, and the milk of such animals should be declared unfit for sale. Happily, the udder is not often tuberculous, and when it is the disease is easy of recognition. Nocard, who examined a hundred diseased cattle, found tubercle in the lung and pleura in forty, in the lungs alone in twenty-five, and in the serous membranes in twenty; the lesions in the remainder being generalised or located in the lymphatic ganglia, the genital organs, the osseous system, or other parts. The characteristic bacilli have not infrequently been found in the fluid expressed from infected muscular tissue; they have also been observed in the blood and in the secretions of diseased organs. Cooking does not render such meat sterile, as Woodhead's experiments have shown, and in this connection it is well to remember that roasting was the least and boiling the most effective method of destroying the bacilli. Woodhead, however, took no notice of the sterilising power of the intestinal secretion, which French bacteriologists have shown has an antiseptic power of great value. The question is not one of yesterday. In 1888 the French Government forbade the sale of tuberculous meat: (1) If the lesions were generalised; (2) if the lesions though localised, had invaded the greater part of an organ, or were manifested by an eruption on the walls of the chest or of the abdominal cavity, such flesh was not to be used even for feeding animals. In Austria when the disease is localised the remaining meat is passed as healthy. On the other hand, in Russia the presence of tubercle, even though localised, is looked on as rendering the whole carcase unfit for food. This Russian edict is, however, never enforced when the extent of the disease is small; indeed, its enforcement would mean the total or almost total prohibition of animal food in European Russia. We may just mention the interesting fact that although wild animals are, as Paget long since showed, subject to many of the diseases of domesticated ones, nevertheless, tuberculosis is unknown in wild animals of the bovine species. The wild cattle of Chillingham know it not; it has not been found in the Yellowstone Park; and among the many thousands of herds of bisons that roamed from the Canadian lakes to the Gulf of California it was never once seen. In the partly domesticated herds of Uruguay and Argentina it is practically unknown; while in cattle, as in man, it is a disease of modern civilisation.

Notes on Current Topics.

An Anti-Alcohol Maniac.

THE injury done by fanatics to the cause they espouse, as all the world knows, is often great, and sometimes deplorable. This is, perhaps, more true of temperance advocates than of any other class of social reformer. Alcohol is the red rag that goads them to fury, and they push the principle of total abstinence from alcohol to the most far-reaching and illogical lengths. For instance, they forbid all medicines that contain alcohol, a step that at once excludes many valuable remedies, such as the tinctures, which in most cases represent the only form in which the active medicinal virtues of the drugs concerned could be rendered available as physic. The most serious of all these prohibitions, however, is probably that which prevents the use of alcohol as a medicine. While the average medical man must agree cordially as to the immense evil wrought by excessive indulgence in alcohol, he will almost invariably, even when a total abstainer himself, endorse the value and necessity of alcohol as a stimulant drug. Certainly the medical practitioner who foreswore the use of alcohol would in that way permit many a patient to slip through his fingers. In case of shock alcohol is by far the readiest and most powerful weapon in the hands of the medical attendant, who would stamp himself as either a fool or a fanatic, or both, should he refuse to avail himself of the stimulant action of alcohol when brought face to face with the kindred conditions of shock, faintness, and syncope. Bearing these facts in mind, it is with mixed feelings of amusement and pity that we find a notorious American temperance advocate, Mrs. Carrie Nation by name, pushing her extreme views to a practical issue in the midst of the havoc and confusion of a railway collision. We are told that recently an express train was wrecked by running into an engine just outside Jersey City, and that a number of passengers were seriously injured, one being transfixed by an iron bar. As soon as she recovered herself sufficiently from the shock, Mrs. Nation's first thought was to prevent the sufferers from drinking the brandy brought to them by the doctors. We are told that this deluded woman actually "broke several bottles containing the hated liquor." The force of fanatic folly could hardly further go. The incident is typical of the shallow intellectual equipment of the extreme temperance agitator. All reasonable men and women would doubtless regard Mrs. Carrie Nation as a most undesirable fellow-passenger in a railway smash. It is clear enough that by stopping the administration of brandy under such circumstances any number of unfortunate sufferers might lose their only chance of surviving the first shock of the accident.

The Moderate Drinker.

THE study of inebriety reveals a well-marked disease passing through various stages which are perfectly recognisable by experienced observers. Certain groups of symptoms can be found in most cases which may be termed pathognomonic, and these will be seen in the later stages more fully developed. The incipient stage, *i.e.*, before spirits are resorted to, is often marked by dietetic peculiarities and other symptoms of cerebral irritability One of the most remarkable mental peculiarities of chronic alcoholism is the firm belief of the victim in his ability to stop at will, and this is almost as well-marked in the moderate drinker. A certain proportion of moderate drinkers remain in this stage during life and placidly assume that it is owing to superior will power that they do not lapse into chronic inebriety, whereas it is often merely a question of circumstances and occupation. That there is a neurotic element in these cases is suggested by the fact that a predominant feature of the mental state is a craving for excitement of some kind. If that craving be satiated by other means then respite is obtained, otherwise alcoholic stimulation almost fatally follows. We are gradually getting rid of the old view that inebriety is due to wilful wickedness; we are getting to recognise that alcohol is to the nervously irritable what hypnotics are to the sleepless—a palliative remedy, but one which is worse than the disease. The study of inebriety is a most interesting department of psychology on condition that it is studied dispassionately. Unfortunately, many specialists in this branch display extraordinary bias, and weaken their deductions by assumptions which are not justified by common experience. We are told, for instance, that the moderate drinker "transmits to the next generation a weakness that is sure to appear in the form of one of the allied neuroses." Such a statement carries its own refutation, for where should we all be if it were true. Our ancestors, or many of them, were, to put it mildly, moderate drinkers, and we ought, therefore, all to be suffering from "one of the allied neuroses." It is difficult to define exactly what constitutes a moderate drinker. We would suggest that the appellation should be restricted to those who never indulge in alcoholic beverages except at meals. Thus defined their number would be small, and there would be less uncertainty as to what constitutes moderation.

A Barber's Shop as a Small-pox Centre.

The desirability of more complete control over certain shops, such as those of barbers, milk-sellers, and publicans, is being constantly forced upon the attention of sanitarians. As regards small-pox, the prevalence of epidemics in various parts of the United Kingdom renders a recent occurrence at Nelson, in Lancashire, of more than usual interest. It was proved in the magistrates' court of that place that deceased had lately suffered from small-pox, that his wife and daughter were suffering a month later from the same disease, but no medical man had been called in, and no notification made, while business had been carried on at the defendant's premises during the whole period of infection. As a consequence of this state of affairs the shop became an active centre of infection before it was discovered by the sanitary inspector, who traced no less than fourteen cases of small-pox to that source. After much trouble the official in question found out that the barber had been ill about a month previously, and still bore the discolorations of small-pox on his face. The defendant declared he was not aware of nature of his illness and could not afford to pay a doctor. He attributed his illness to the bad smell of a fish shop. The flimsiness of this defence, which clearly did not exonerate the defendant from seeking charitable medical advice for so much serious illness in his household, and from thereby learning the nature of the complaint, was recognised by the bench in their extremely lenient fine of twenty shillings and costs.

Women and Water.

An interesting discussion has recently been proceeding in the lay press on the likes and dislikes of women for water as an agent for personal cleansing. Mere man, generally speaking, is not devoid of aquatic instincts. Bathing is one of the delights of boyhood. The average Englishman of the upper classes suffers much discomfort if deprived of his morning tub. Most middle-class homes, and indeed, in some towns, the habitations of the superior labouring class, are provided with excellent baths. The baths provided in such resorts for the poor as Lord Rowton's lodging houses are excellent. And now municipal enterprise in most large towns has provided admirable swimming baths and wash-houses. Yet, in spite of a growing sense of the importance of cleanliness as being in very truth next to godliness, it is contended that women still remain bound in the old fetters of superstition and ignorance regarding the danger of bathing. It is regarded as a serious risk to wash the head; and the dangers of "chills" and "colds" and "congestions" still frighten the uninstructed. The idea that a cold bath is injurious during menstruation, pregnancy, and lactation still lingers. While the women of the upper class have readily learnt from their masculine fellows the advantages of water, and are now often proficient swimmers and regularly enjoy the morning dip, females of the middle and lower class make but little use of the baths available in their own homes, and but rarely visit the public swimming baths reserved for their use. In most households absolutely no arrangement is made for the regular use of the bath by the servants, although on hygienic and all other grounds the thorough cleanliness of those who serve us should receive the greatest attention. During the last few years the importance of fresh air is being strenuously enforced, and there are signs that some awakening of the general intelligence has been obtained; it is now surely time that people should be taught that water both externally and internally is an essential element for the maintenance of a high standard of health.

Puerperal Eclampsia.

The etiology of puerperal eclampsia is one of the many problems that is ever before the physician, and is one full of interest. For years, indeed, until ovariotomy became a recognised operation, the theory was that the disease was caused by pressure of the gravid uterus on the renal vessels. Laparotomy, by demonstrating that pressure from abdominal tumours was not followed by eclampsia, was fatal to the theory. A fresh theory, and one supported by a considerable body of evidence, comes to us from Russia, where Professor Stroganoff noticed in the St. Petersburg Midwives' Institute a series, or rather a number of series, of eclampsia, and, on the grounds that none of the many existing theories would reasonably account for the cases, he began to suspect that the disease was infectious, and commenced an analysis of recorded cases, the most important of which were Olshausen's series, eleven in number, comprising eighty-three cases, and Zwiefel's (*Ber. Klin. Woch.*, 1878) records of twenty series. He concludes that the disease is caused by an air-borne contagion, which infects the patient through the respiratory tract. The disease usually takes six days to develop, is only slightly virulent, and infects neither children nor men, and women are not susceptible to it except during the puerperium. The theory is worth consideration.

The Preparation of Museum Specimens.

No one can visit the various pathological museums in London and elsewhere without feeling that much time and expense have been expended in the collection and preservation of valuable specimens, and yet, in consequence of the methods adopted in their preparation, only limited success has been secured. Marked improvements have been noticeable in recent years, and the introduction of the formalin method has done much to preserve the natural features of specimens. But much advance needs to be made before it can be said that altogether satisfactory results have been attained. Hence all experiments in this direction are worthy of careful consideration. Dr. Harvey Littlejohn, of Edinburgh, in the current number of the *Journal of Pathology*, says the preparation is first subjected to Kaiserling's method of hardening: After washing away adventitious blood, the specimen is immersed in formalin solution. It is then placed in pure methylated spirit until the original colour returns. It is then removed to a glycerine and water solution to which a little formalin has been added. After being thoroughly impregnated with glycerine the preparation may be removed to a jar and securely covered as a "dry" specimen. The specimen should be laid upon absorbent wool, and before the jar is sealed about an ounce of pure glycerine, mixed with a little formalin, is either placed underneath the wool or poured over the surface of the preparation as it lies in position. The interior of the jar must be air-tight, and ordinary glazier's putty is effectual in sealing the cover. Dr. Littlejohn has employed his method for five years, and is very pleased with his results. We shall be glad to hear the views of other practical pathologists as to the utility of this procedure.

Honour to a Physician.

The Commonwealth of Georgia has voted 7,000 dols. for a statue to be erected in honour of Crawford Williamson Long, the discoverer of general anæsthesia, in the Hall of Fame, in the Capitol, Washington, D.C., U.S.A. Each State in the Union is entitled to erect two statues in the Hall, and the selection of the names of those most worthy is one in which great care is exercised. As yet Georgia is unrepresented, and although the Commonwealth had resolved to honour Crawford W. Long, the necessary money vote was deferred until his claims to the honour of discovering general anæsthesia were placed beyond doubt. Of those who took an active interest in examining the evidence adduced in favour of the many candidates for the honour were Dr. Luther B. Grandy, who died recently in the Philippines, whilst in charge of the U.S A. troops; Dr. Landon B. Edwards, who obtained from Georgia evidence from authoritative legal documents of the Supreme Court of the Commonwealth, and from living, trustworthy witnesses; and Dr. Marion Sims, whose paper appeared in the *Virginia Medical Monthly*; and Dr. George Foy, who exhibited the proof of Dr. Long's original paper to the Society of Anæsthetists in London, by favour of Dr. Luther B. Grandy, of Atlanta, Ga Dr. Long was by descent an Ulster man, his father having left Letterkenny, co. Donegal, to which the family belonged, in the eighteenth century. In 1861 Dr. Long enlisted in the Confederate States service and was appointed surgeon to the base hospital at Athens, Ga., where he was engaged until the capitulation of General J. E. Johnson at the termination of the Inter-States war

Bournemouth Medical Motorists.

Nowhere, perhaps, are the advantages of the motor car as a means of locomotion as widely appreciated by members of the medical profession as at Bournemouth, where, judging from recent accounts, it must be the exception for patients to be visited otherwise than in one of these unduly self-assertive vehicles. Instead of the odour of iodoform with which antiseptic surgery has imbued the practitioner, he now brings with him an agreeable odour of benzine, which, low as it ranks in the list of perfumes, will doubtless be preferred by many to the pharmaceutical emanations of ancient times. A collateral advantage attending the use of a motor car in this southern health resort is the appearance of portraits of the envied possessors in the current number of the *Autocar*.

Medical Political Influence.

Our contemporary *Truth* appears to be firmly convinced that the medical profession commands sufficient influence in Parliament to secure the promotion of any bill they may think fit to introduce, having for object to impose salutary restrictions on the sale of nostrums and to check the fraudulent misrepresentations of quacks. Of course it is open to any section of the community to *promote* a bill for this or any other purpose, but between promotion and adoption there is a great gulf. Did the profession rejoice in such power there would long since have been no occasion for *Truth* to hurl well-deserved and pungent adjectives at the proprietors of the Viavi humbug or the Drouet delusion. As a matter of fact we are unable to obtain the power to inhibit the practice of medicine even by unworthy members of the profession whose names have been removed from the Medical Register for infamous conduct, and the greatest difficulty is experienced in obtaining the conviction of the grossest offenders against the laws regulating the practice of medicine. The State reaps a rich harvest levied on the depredations of the unscrupulous vendor of proprietary nostrums in the shape of the Medicine Stamp Act, and shows the greatest disinclination to forego a source of revenue which is distinctly immoral, and is a tax levied on the sick. The continued existence of the various quack abominations against which our contemporary has so long lifted up its voice is evidence of the gullibility of the public and the indifference of the legislature.

The Contract Practice Struggle.

Under the heading of "Doctors' Trades-Union" the provincial newspapers chronicle the various episodes in the general movement for increased rates which is in progress throughout the length and breadth of the land. Low as are the average rates for club and contract practice, there are districts in which even lower rates obtain, and the first move is in the direction of bringing the minimum rates into line with the normal. Later on, no doubt, attempts will be made to increase the general rates in proportion to the rise of wages which has taken place in all industries during the last fifty years. As to the outcome of the movement, there need be no anxiety, and we are justified in hoping that in the vast majority of instances the increase will be conceded after consultation and due deliberation. Working men, however reluctant to pay higher rates for medical attendance, are, if properly handled, not impervious to reason, and, when they prove otherwise, a little gentle pressure will convince them of the reasonableness of the demands formulated by the medical officers of their friendly societies. It is a noteworthy fact that the greatest opposition comes from members of the great trades-unions, but this may be explained on the ground that in virtue of their membership they feel better equipped for resistance.

Suicidal Aeronautics.

The minds of the aeronautical fraternity have been much exercised by recent mishaps in the manipulation of airships, and, judging from the discussion which took place last week at the Aeronautical Institute, it is felt to be imperatively necessary to impose certain restrictions upon inventors before allowing them to raise themselves above their fellows. It was suggested, for instance, that only certificated aeronautists should be authorised to take charge of a flying machine, any accident occurring at the hands of any uncertificated persons being punishable by fine or imprisonment. One speaker, indeed, urged that he should be treated like an ordinary homicidal or suicidal lunatic. Had such laws been in vigour in Montgolfier's time he would infallibly have got "six weeks' hard" for making a fool of himself in his fire balloon, nay, the inventors of the steam locomotive were formally accused by the Press of their day of wilfully endangering tho lives of their fellow-citizens. Even the cyclist who daily threads the maze of London traffic at his risk and peril would fall within its scope; in fact, no enterprise of pith and moment would be possible if, to speak allegorically, every person were compelled to produce evidence of knowing how to swim before being allowed to enter the water. A life lost in the advancement of knowledge is not wasted; it is a sacrificial offering on the altar of science calling for public recognition and admiring sympathy.

The Prognosis of Death.

Considerable interest attaches to the cause of death in persons who have recently insured their lives, if only because it shows how fallible are even expert opinions on the "prospect of life." The medical officer of one of the largest life insurance offices of the United States, in a recently published report, states that of 2,375 deaths of insured in 1901 ninety-five took place within a year of the issue of the policy. Casualties accounted for nineteen, pneumonia for eleven, and consumption for seven, while heart disease and typhoid fever took nine each. Four succumbed to meningitis, and five to appendicitis, while three died of apoplexy and six of cancer. Two died of renal affections and the remainder of more or less fortuitous diseases. Of course, none except a fortune-teller could foresee typhoid fever apoplexy, or death from accident, but what must we think of consumption, cancer, and heart disease? Even appendicitis is not as accidental as it may appear at first sight, since it is infinitely probable that some, at any rate, must have had previous attacks, and we presume no medical examiner would accept the proposal of a person who had suffered from non-operated appendicitis. It would be interesting to compare a hundred deaths within a year of insurance in this country with the above list, for it would afford some ground whereon to institute a comparison between the diagnostic ability of the medical officers of life offices on this side of the ocean. The very large proportion of early deaths from accident gives prominence to the life-cost of modern machinery and appliances, but it is impossible to appreciate its exact significance without knowing precisely the social status of the victims.

The Ubiquitous Reporter.

The reporter is a necessary evil in these days of cheap journalism, and he must be borne with when he cannot be repelled. Yet there are certain places and circumstances in which public opinion unhesitatingly declares him to be *de trop*. Among them is the room in which a post-mortem examination is being performed for medico-legal purposes. Very properly did the judge in the Ipswich murder case animadvert on the presence of a reporter while the autopsy of the victim was being made, and one would like to know in virtue of what occult protection he was admitted—for he could hardly have been present by chance or by mere negligence. The judge promised to take cognisance of the paragraphs in the newspaper containing the allusion to this part of the investigation. and to deal with them *sec. art.* We are surprised that the medical men engaged in the case did not "spot" the intruder and have him ejected. Of one thing we may be sure, that no medical sanction was given to his unwarrantable intrusion.

The Standardisation of Drugs.

There exists, as most of our readers are probably aware, an official compilation known as the British Pharmacopœia, the object of which, *inter alia*, is to formulate certain tests of purity and methods of preparation having for object to ensure as far as possible the uniformity of preparations for medicinal use. Unfortunately, no provision is made to ensure uniformity of physiological action and therapeutical effect on the part of these products, effects which vary within extraordinarily wide limits, even when the technical directions contained in the official programme are rigidly adhered to. This is a fact which must be familiar to all practitioners, especially those who, dispensing their own medicines, are better able to observe their action. Mere titration of the principal alkaloidal ingredient of a drug does not fulfil the desideratum, since the chief constituent does not necessarily represent the whole activity of the drug. It is not for us to suggest the ways and means by which this object might be attained, that being a purely technical matter with which the pharmacopœial committee must be left to deal, but that there is room for reform will be seen from the paper read by Mr. Wippell Gadd, an abstract of which we publish elsewhere. The matter was fully discussed at yesterday's meeting of the Pharmaceutical Society, when various suggestions were made with this object in view. These we shall deal with more fully later.

Uterine Fibroids and the Menopause.

It is odd that there should be so much difference between experts on such a simple question as the tendency to disappear of uterine myomata after the menopause. The belief that such a tendency exists is so general, and has received such authoritative sanction, that it is formally recognised in every text-book, and is held by many surgeons to justify an expectant attitude in presence of uterine hæmorrhage due to fibroid when the age of the patient is such as to allow the advent of the climacteric period to be awaited. The structure of uterine fibroids or myomata is indistinguishable from that of the uterus proper, and one would naturally expect it to share in the atrophy which overtakes that organ at this period. Moreover, there is ample evidence to show that fibroids which have grown very rapidly during pregnancy have retrogressed with equal rapidity along with the uterus during the process of involution. There are few gynæcologists who cannot recall instances of fibroids which have at one time given trouble and have subsequently shrunk to such an extent as to become inaccessible to examination. Altogether one appears justified in accepting this view as correct; yet, in Mr. Bland-Sutton's opinion, it is "pure superstition." It is a pity that such an important point should be left undecided, seeing that it would be within the power of a small committee of the Obstetrical Society to settle it once for all. It is not asserted that all fibroids evince this tendency, and possibly this may depend in great measure upon the proportion of fibrous tissue which enters into the composition of the growth. One would expect those in which muscular tissue predominated to be more apt to undergo shrinkage than hard, fibrous growths, but whether this is the case cannot for the present be stated. In view of the important bearing which this question of spontaneous shrinkage has upon the adoption of surgical treatment, it is highly desirable that it should be cleared up, and we would suggest the matter as suitable for general discussion at one of the medical societies.

The New York Medical Society has succeeded in obtaining the conviction of a local clergyman for the illegal practice of medicine. The reverend gentleman had for three years past been advertising a cure for the drug habit, and had organised a committee to collect subscriptions to defray the cost of the treatment for indigent patients.

Bubonic Plague.

Dr. Bruce Low's report on bubonic plague has been presented to the President of the Local Government Board, England. The report will remain of historical value as the most exhaustive and clear pronouncement that has yet appeared on the disease. He has not only recorded chronologically and topographically all recent manifestations of plague, but he also indicates in each instance the source of the malady, the dimensions of the plague prevalence, its fatality, and the measures adopted with regard to it. Not the least valuable feature of the report is the section dealing with the confusion of the bubonic plague with other maladies, usually some commonplace current malady, as, for instance, influenza, enteric fever, malaria, and the like. But so often has confusion thus arisen as almost to suggest mimicry, as it were, by plague, on first transplantation to a new soil, of indigenous maladies. The report adds that notwithstanding the facilities afforded to the plague in dense populations of fastening on a number of localities presumably prone to foster it, this disease has seldom become quickly or largely epidemic. In this respect differing from cholera, such a marked difference in the infectivity of the two diseases offers an interesting subject of study to etiologists and epidemiologists, and gives the sanitarian a reasonable hope of being able to prevent the spread of, if not to completely stamp out, bubonic plague.

Abuse of Medical Charities.

A medical man, who, by the way, signs his full name, qualifications, and address, has recently written a long letter to the *Western Daily Press* (October 14th) on the subject of hospital abuse. He quotes figures showing that some 125,254 persons were relieved during the year 1901 by the Bristol medical charities. Upon that basis, taking the population of the city in question at 130,000, he estimates that one in every two and a half of the entire population of Bristol get relief from the medical charities in times of sickness; and one in every five and a-half die in charitable institutions. There is no evidence furnished as to any attempt to exclude persons coming from other parts from Bristol hospitals, a fallacy that is of the utmost importance in view of the prominence of Bristol as the chief town in the west of England. Otherwise the proportion of the figures suggesting that out of 130,000 citizens no less than 125,000 receive medical charity in the course of the year would be amazing and incredible. Allowing for all sources of error, however, the case of the writer would, nevertheless, be proven by an immense margin of material evidence. Sooner or later this pauperising abuse must be recognised by the philanthropic public who support the charities. We agree with the writer whose letter we have quoted, in his view that the time has come for making a united protest against hospital abuse, inasmuch as thrift is discouraged, self-respect is impaired, and the people are demoralised thereby. And, it may be added, an honourable profession is defrauded of a just and legitimate means of livelihood.

The Female "Dosser."

ACCOMMODATION for London's female vagabonds is meagre. The homeless women of the metropolis have too long been neglected. From a recent return of registered common lodging-houses in London we find that there is accommodation for 2,725 women, and of these 2,151 beds are for single women and 574 beds for married couples. We learn from Dr. Shirley Murphy that the London County Council, as we think very rightly, has discouraged houses allowing accommodation for single persons of both sexes and "doubles." It would seem also that the provision at present existing for females is generally inferior to that available for men, particularly as regards kitchens and lavatories. We are glad to see that it is proposed shortly to provide a municipal lodging-house for women.

Society for the Study of Disease in Children.

A SPECIAL meeting of this Society is to be held in December for the discussion of "Tuberculous Peritonitis." The subject is one of very great interest and importance, and communications bearing thereon have been promised by Dr. E. Cautley, Dr. James Barr (Liverpool), Dr. Theodore Fisher (Bristol), Dr. G. A. Sutherland, Dr. Leonard Guthrie, and Mr. W. Watson Cheyne.

PERSONAL.

LORD STRATHCONA will take the chair at the November dinner of the Aberdeen University Club on Friday, the 19th inst.

DR. R. H. ADERS PLIMMER has been appointed Grocers' Company Research Student at the Jenner Institute of Preventive Medicine.

DR. WILLIAM HUNTER is to take the chair at the dinner of the Edinburgh University Club at the Criterion Restaurant this (Wednesday) evening.

SIR WILLIAM J. COLLINS will deliver a lecture on "The Housing Question in London" before the King's College Medical Society on Friday next, at 8 p.m.

SIR GILBERT PARKER, M.P., will preside at the dinner which is to be given to celebrate the jubilee of Trinity College, Toronto, at the Hotel Cecil on Monday next.

DR. E. S. BASHFORD, assistant to Sir Thomas Fraser, F.R.S., of Edinburgh, has been selected for the post of Superintendent of Cancer Research, and will enter upon his duties forthwith.

Alleged Assault.

MR. WILLIAM RIDDELL MATTHEWS, of Brooks Bar, Manchester, appeared at the County Police Court, Strangeways, last week, in response to a summons charging him with assaulting a girl, age 16, who had been to his surgery to have a tooth extracted. After the hearing the magistrate declined to express any opinion and committed the case for trial, Mr. Matthews being liberated on his own bail for £20.

BIRTHDAY HONOURS.

AMONG the titular appointments made by the King on the occasion of his Majesty's birthday, we note the following:—

C.M.G.

W. H. W. Strachan, Chief Medical Officer of the Colony of Lagos.

Members (4th class) of the Royal Victorian Order.

F. W. Hewitt, M.D., Honorary Anæsthetist to his Majesty.

Donald James Mackintosh, M.B.

C.B. (Military Division).

Henry C. Woods, C.V.O., M.D., Inspector-General of Hospitals and Fleets.

C.B.

William P. Power, F.R.S., Principal Medical Officer to the Local Government Board.

C.I.S.O.

G. McNaughtan, M.D., Medical Officer Scotch Prison Service.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

SCOTLAND.

[FROM OUR OWN CORRESPONDENTS.]

ENDOWMENT OF MEDICAL RESEARCH IN EDINBURGH.—Mr. T. Francis Mason, of Freeland Lodge, Woodstock, who has recently instituted a research scholarship of the annual value of £200 for the study of the thymus and other ductless glands, has generously given a donation of a similar amount to the Laboratory of the Royal College of Physicians of Edinburgh, to be devoted to the further prosecution of a research on the ductless glands which has already been in progress there for several years, under the superintendence of Dr. Noël Paton. Finding by a domestic bereavement that existing knowledge with regard to the physiology and pathology of these glands is very incomplete, Mr. Mason has taken this most practical means of advancing the scientific study of the subject.

GLASGOW OPHTHALMIC INSTITUTION. — The Post-Graduate Course of Demonstrations on Diseases and Injuries of the Eye was inaugurated last week. There was a good attendance. Professor T. McCall Anderson, who introduced the lecturer, commented on the value of post-graduate instruction. The subject of the first demonstration was "Dimness of Sight in Diseases of the Kidney characterised by Albuminuria."

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

THE ROYAL INFIRMARY.—Great interest continues to be taken in the formation of a new Board. It will be remembered that the old Board resigned after its scheme for re-building on the old site had been thrown out by a large majority of the trustees. Many members of the old Board were willing to serve on the new one, and a special meeting of the trustees was called to legitimise the election of a new Board at this juncture. A strong committee of trustees was formed, and it was thought for some time that the twenty-one gentlemen nominated by this committee would be elected without contest, so avoiding the trouble and expense of a contested election. The last action of the old Board was to fix the date of the election for November 14th. This decision was adversely criticised by the trustees' Committee, as it made Thursday, November 6th, the last day on which nominations could be received, and thus unduly hurried their movements. The situation was further complicated by the decision of the Women Guardians and Local Government Association to nominate two lady candidates for election to the Board. This raises a question which has not previously been discussed, and which introduces some awkward elements into the contest. The trustees' committee state that the idea was sprung on them too late for the inclusion of ladies in their list of nominations. They approve, however, of the employment of ladies in the government of the Infirmary, and suggest the early formation of a ladies' committee, which would doubtless be represented upon the board of management. It gradually became clear that a contest was unavoidable, and when the nominations were made known it was seen that there are thirty-one candidates for the twenty-one places on the Board. Twenty-one gentlemen are proposed by the trustees' committee; two ladies, by the Women Guardians Association; one lady and seven gentlemen by other trustees. The result of the election cannot fail to be a progressive Board, and one which will push forward the scheme for rebuilding on a new site without undue loss of time.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

THE OPEN-AIR TREATMENT OF CANCER.

To the Editor of The Medical Press and Circular.

Sir,—We have heard much lately of the open-air treatment of phthisis. This treatment aims at bringing the vital processes to such a level as will enable the natural and healthy elements of the body to counteract the unnatural or morbid ones. Or, to speak in greater detail, such an array of defensive elements, as represented by leucocytes, lymphoid cells, and giant cells, is created as to destroy or render impossible the life of the offensive ones, as represented by the tubercle bacillus and its derivatives. This result is brought about by a plenitude of fresh air and good food.

I propose to apply these factors to the treatment of cancer. By fresh air I mean such as can be obtained, not on the balconies of a hospital at Brompton, but on a summit of the South Downs for example. By constant exposure to such air and *sufficient* food, and by this I mean as much as will suffice to keep the vital processes at the highest, which necessitates that the patients should be always kept slightly on the "hungry side," such an army of lusty young leucocytes might be created as would turn in hungry desperation on the cancer elements and rend them. I again emphasise the importance of sufficient food, as the advocates of the open-air treatment of phthisis believe and practise the astonishing fallacy that too much food is better than enough. The result is, and must be, that a large proportion of the defensive elements called into existence by the treatment are occupied in combating and neutralising the morbid products of over-assimilation.

That the human body contains or can produce elements capable of destroying, or rendering impossible, the life of cancer elements, is proved by the occasional disappearance, or at least atrophy, of cancerous tumours. Such an undoubted case, as evidenced positively by microscopic examination, was instanced a few years ago in the *British Medical Journal* by a Dublin surgeon. We have all seen how the warts of adolescence disappear of their own accord as the system becomes more stable. Mr. Hutchinson has pointed out that if several of such a crop are destroyed, the rest disappear spontaneously. I can well remember seeing a poor Jewish woman who led a lonely life for many years in the dreadful companionship of an immense and evil-smelling cancer, that had destroyed the left breast, crept under the axilla, and spread over a considerable area of the back. Here, surely, was resistance.

I am aware that cancer occurs on the "hill side" and in the "alley," but always under the same vicious conditions of too much or improper food, and in the latter instance, bad air. Both these factors would be eliminated by what I propose.

I am, Sir, yours truly,
Hope Grant, F.R.C.S.E.

15, Christopher Street, E C.

WHOOPING-COUGH.

To the Editor of The Medical Press and Circular.

Sir,—From what I saw of whooping-cough at the Hospital for Sick Children, Great Ormond Street, when about 3,000 cases passed under my notice, I came to the conclusion that it was impossible to arrive at any clear conclusions as to the nature of the disease from hospital resources. What impressed me more than anything on this point was the account given me by Sir William Jenner of the change in his views regarding the malady after he suffered from it late in life. He confessed that until then he never understood it. Much the same thing happened to Sir Thomas Watson, who wrote to me at the time his son, the present baronet, and his grandsons caught whooping-cough from the younger children.

There is no doubt but that those who work among the poor and see the disease in the crowded parts of a great city can best understand the very singular nature of the malady. It is more fatal to young children than all other diseases combined, for it assumes very different forms, and the symptom of the whoop is a small one among infants. From the time of Ballonius (de Baillou) in 1578, that is, a century before Willis in England described whooping-cough, it was known in Europe. The time has come when its infectious nature and other peculiar characters are being recognised, and the erroneous views entertained regarding the disease are being corrected.

I am, Sir, yours truly,
Robert Lee.

DENTAL ANTISEPSIS.

To the Editor of The Medical Press and Circular.

Sir.—With reference to your editorial note to-day (Nov. 5th), I would like to point out that every dental surgeon who performs the more delicate operations of his profession is, so to say, bound over to the practice of strict antisepsis. If he disregard it the vast majority of his operations will turn out unsuccessful. For example, in manipulating the canals of roots, if nerve-extractors and other such instruments be not sterilised and strict antisepsis observed throughout, the danger of exciting acute alveolar abscess becomes extreme; and a patient going about with a badly swollen face as the result of an attempt to save a valuable tooth, which after all may have to be drawn, forms about as bad a walking advertisement as a practitioner can make for himself. Such accidents do not happen unless as comparatively rare exceptions under the hands of those who practise strict antisepsis. Similar remarks apply to extraction. Every dental surgeon knows that foul forceps may set up local sepsis or even give rise to much more serious distant effects; and as the trouble of keeping instruments clean is really small, it must be an uncommonly careless practitioner who neglects it. Among a certain class of practitioners and "tooth drawers" complete disregard of antiseptic precautions is too commonly displayed. Cases exemplifying this are to be found in numbers at the dental hospitals and dental departments of general hospitals. Every now and again cases of death following tooth extraction are reported. Two of such cases within the past few years have been under my own notice. The tooth in each case had been drawn by an unqualified practitioner. An inquest in each case was held, and the medical evidence proved the deaths to be due to septicæmia, the result of infection of the alveolar wound. Comment was made upon the rough and filthy condition of the instruments which had been used. It is customary to make light of dental diseases because they do not commonly directly or indirectly involve danger to life; but every dental surgeon in active practice has daily brought home to him the fact that these diseases inflict in the aggregate a terrible sum of physical misery. It is not to be expected that a Legislature which refuses to protect the health and lives of the simple public against the wiles of the most infamous and blatant medical quack, will interfere in the case of the fraudulent dental pretender, who if less harmful, is so only because his scope for evil is more limited.

I am sir, yours truly,

November 5, 1902. M.R.C.S., L.D.S.

Obituary.

LENNOX BROWNE, F.R.C.S.Ed.

The death of Mr. Lennox Browne, which took place at Frith Lodge, Northwood, Herts, on Sunday, November 2nd, from malignant disease ot the stomach, marks the disappearance of a striking personality from among metropolitan specialists. Mr. Lennox Browne had attained a well-recognised position in his special department of practice, and if he did not perchance occupy quite that to which his skill and experience appeared to entitle him it was due to the fact that his energies, indefatigable as they were, were too diversely employed. From his youth upwards Mr. Lennox Browne displayed remarkable artistic proclivities, and his water-colours are highly prized, not only by his friends who were fortunate enough to become the recipients thereof, but also by the more censorious public who paid for them. This talent he turned to excellent account in the pictorial representation of morbid appearances of the throat and nose, and the coloured drawings which grace his *magnum opus* on "Diseases of the Throat, Nose and Ear" greatly enhance the value of a treatise which for many years was the most authoritative text-book on the subject. Mr. Lennox Browne was sixty-two years of age at the time of his death, and he qualified in 1863. After a brief sojourn in Australia he fell in with the late Sir Morell Mackenzie, with whom he remained in close literary association for upwards of seven years, during which period he illustrated Mackenzie's essay on "Growths in the Larynx." He was mainly instrumental in the foundation of the Central London Throat and Ear Hospital, which was opened in 1874, and he only retired from the active staff two years ago, when he was appointed Consulting Surgeon.

Mr. Lennox Browne was combative and masterful by nature, and this too marked individuality created for him numerous enemies, many of whom were admittedly of his own making. He, however, possessed remarkable organising qualities, and his assistance was highly prized by his colleagues at the Central Hospital, the interests of which he always had at heart. On two occasions his services were formally recognised, first on his fiftieth birthday, when they presented him with a handsome silver bowl, and again on his retirement from the active staff, when he was presented with a suite of old English furniture for his country house and an illuminated address. His residences, both in town and country, were full of charming drawings and pictures, many of them signed by the best-known names in the artistic world.

Mr. Lennox Browne was the son of Dr. Isaac Baker Browne, at one time well known in the obstetrical world, and one of the pioneers of ovariotomy in England, and this at a time when much opprobium was wasted upon those who advocated a departure in surgery, which was not put on a sound basis until Sir Spencer Wells brought his master mind to bear upon it and shamed professional opinion into acquiescence. He bore his severe sufferings with the greatest fortitude, seeing patients as recently as September 16th, and he continued to interest himself in his garden and in artistic pursuits until only three weeks since, when his condition obliged him to take to his bed.

He was the author, among many other works, of "The Throat and Nose and their Diseases," which reached a fifth edition, and is still unique by reason of the beauty and fidelity of the illustrations; this was translated into French in 1891; "Diphtheria and its Associates" (1896); "Deformities and Morbid Growths of the Pharynx and Larynx," and, with the late Mr. Emil Behnke, he published a work on "Voice, Song and Speech," which ran into eighteen editions. When the serum treatment of diphtheria was introduced Mr. Browne published several papers adversely criticising the results claimed for this treatment, but, although they attracted a good deal of attention at the time, universal experience has since shown that his arguments did not repose on any solid substratum of fact.

He was a prominent Freemason, being a Grand Officer of England as well as of the Grand Lodge of New Zealand, and he was one of the oldest living members of the Savage Club.

He was buried at Northwood Parish Church on Wednesday last, the ceremony being attended by his hospital colleagues and members of the committee of management and a number of friends. *Requiescat in pace.*

Laboratory Notes.

NEW TABLOIDS.

Additions to the list of "tabloid" products manufactured by Messrs. Burroughs Wellcome and Co. are so numerous that, in spite of their individual interest, it is difficult to keep abreast of the tide.

Among recent additions to the list of "tabloid" ophthalmic products we note atropine sulphate gr. $\frac{1}{800}$. This is readily soluble, and is intended to be introduced directly into the conjunctival sac, when it promptly produces the characteristic effects. In view of the ease with which solutions of atropine undergo decomposition when kept this method of oculotherapeutics presents obvious advantages.

"Tabloid" Aspirin, gr. v., is a convenient form in which to administer this substitute for salicylic acid and the salicylates. Aspirin is an acetyl-acetic acid, and is recommended in the treatment of articular rheumatism, &c. The dose is from 5 to 15 grs., repeated several times in the twenty-four hours.

The "tabloid" Apomorphine compound contains gr $\frac{1}{50}$ of apomorphine in combination with chloride of ammonium and liquorice. The expectorant action of the alkaloid is thus reinforced by the stimulant action of the ammonium chloride, and the demulcent properties of the liquorice. They are directed to be allowed to dissolve in the mouth, but having tried one we recommend that they be swallowed *subito* before the ammonium chloride has time to reveal itself in solution.

The "tabloid" of Yellow Iodide of Mercury contains a definite chemical salt, free from metallic mercury, and is, under ordinary circumstances, perfectly stable. Each tabloid contains gr. $\frac{1}{8}$ of the salt.

The "tabloid" of Compound Liquorice Powder contains 30 grs. thereof in compressed form, and affords a very convenient means of administering an otherwise disagreeable preparation.

The "tabloid" Kino Compound Powder contains 5 grs. of the official preparation, which is a well-known and trustworthy sedative-astringent in the treatment of irritative diarrhœa, dysentery, &c.

HYPODERMIC SUCCINIMIDE OF MERCURY TABLOID.

These products contain gr. $\frac{1}{5}$ of hydrargyrum succinimidum, and are designed to facilitate the hypodermic treatment of syphilis and syphilitic manifestations. Injected well into the muscles this salt gives rise to but trifling local reaction, thus rendering possible a very efficacious method of treatment, the only objection to which, when certain other salts of mercury are used, is the pain following each injection.

SOLOID MICROSCOPIC STAINS.

It is certainly a happy idea to put up current stains for microscopical work in "soloid" form, thus facilitating the preparation of fresh solutions containing a well-defined proportion of the ingredient. "Soloid Microscopic Stains" are issued in packages of six. The full list comprises: Soloid Bismarck brown, borax, methylene blue, eosin, eosin methylene blue (Louis Jenner), fuchsine, gentian violet, Gram's iodine solution, hæmatoxylin, hæmatoxylin (Delafield), methylene blue, methylene violet, and thionine blue.

"JENULE" OF MORPHINE AND BELLADONNA.

This suppository contains morphine hydrochloride gr. $\frac{1}{4}$, with ext. belladonnæ gr. $\frac{1}{8}$, enclosed in a closely fitting tinfoil sheath. The sedative and anodyne effects of this combination of drugs are thus rendered available, in a neat and convenient form, for use in affections of the tissues and organs adjacent to the lower bowel.

Royal College of Surgeons, Ireland.

Last week, in the Albert Hall of the Royal College of Surgeons in Ireland, the President of the College presented to the successful students the medals and prizes awarded at the termination of the previous sessions in the School of Surgery, and to Dr. Cuthbert Eccles, of Greystones, County Wicklow, the Royal Humane Society's testimonial for having on June 26th last gallantly rescued a gentleman from being drowned while bathing.

The President of the College, Mr. L. H. Ormsby, in the course of his inaugural address introductory to the Medical Session 1902-1903 in the schools attached to the college, referred to the present condition of the Royal Army Medical Corps and the Irish Poor-law Medical Service.

At the close of his address Dr. Cuthbert Eccles was called forward, and the President, addressing him said: Dr. Cuthbert Eccles, it is my proud privilege as President of this College to be the medium of presenting to you the Royal Humane Society's Testimonial for your heroism in plunging into the sea at Greystones, County Wicklow, on June 26th of this year, and gallantly rescuing from drowning Mr. W. H. Lumley. . Dr. Eccles, from that date you are an honoured Licentiate of this College, and as the dispensary medical officer of Delgany you have, coupled with the late Dr. Smyth, of Burtonport, and others, added further honour to your class and calling, for you have upheld the proud distinction of a brave man by saving a valuable life at the risk of your own. Your certificate has been signed by his Royal Highness the Prince of Wales as President of the Royal Humane Society, and I trust you may be long spared in health and happiness to enjoy your well-merited honour.

The President then presented the medals and prizes as follows:—

Winter Session, 1901-1902.—Stanley Memorial Gold Medal in Anatomy: J. J. Connolly. Descriptive Anatomy, Junior, W. St. L. Moorhead, 1st prize and medal; L. Lucas, 2nd prize and certificate. Senior, R. Bury, 1st prize and medal; I. Allaun, 2nd prize and certificate. Practical Anatomy, first year, J. B. Kelly, 1st prize and medal; J. Prendiville, 2nd prize and certificate. Second year, R. Bury, 1st prize and medal; R. A. Brown, 2nd prize and certificate. Third year, J. J. Connolly, A. N. Crawford and J. Parker (equal), 1st prize and medal. Practice of Medicine, M. Lochrin, 1st prize and medal; J. S. Sheill, 1st prize and certificate. Surgery, J. Spencer Sheill, 2nd prize and medal; W. R. Ormsby, 2nd prize and certificate. Midwifery, J. J. Connolly, 1st prize and medal; F. O'D. Fawcett, 2nd prize and certificate. Physiology, R. A. Brown, 1st prize and medal; E. Smith, 2nd prize and certificate. Chemistry, L. Lucas, 1st prize and medal; E. F. Ward, 2nd prize and certificate. Pathology, R. W. Burkitt, 1st prize and medal; W. R. Ormsby, 2nd prize and certificate. Physics, L. Lucas, 1st prize and medal; E. W. Greene, 2nd prize and certificate.

Summer Session, 1902.—Barker Anatomical Prize, £30, R. G. Allen. Carmichael Scholarship, £15, J. J. Connolly. Silver Medals in Operative Surgery, W. R. Ormsby and J. J. Ryan (equal). Practical Histology, W. W. Boyce, 1st prize and medal; A. C. Adams, 2nd prize and certificate. Practical Chemistry, C. M. Burton, 1st prize and medal; J. B. Kelly, 2nd prize and certificate. Public Health and Forensic Medicine, F. O'D. Fawcett, 1st prize and medal; L. F. Kelly, 2nd prize and certificate. Materia Medica, P. V. Dolan, 1st prize and medal; H. S. Misstear, 2nd prize and certificate. Practical Pharmacy, C. M. Burton, 1st prize and medal; E. J. Smallman, 2nd prize and certificate. Biology, C. M. Burton, 1st prize and medal; A. J. Faulkner, 2nd prize and certificate. After a vote of thanks to the President had been passed the meeting terminated.

Cork Medical and Surgical Society.

The annual dinner of the Cork Medical and Surgical Society was held on Saturday evening, November 1st, at the Imperial Hotel, Cork. Dr. P. T. O'Sullivan, President of the Society, occupied the chair, Dr. J. Cotter, Vice-President, occupying the vice-chair, and about fifty members and guests sat down to dinner. After the usual loyal toasts had been duly honoured, the President proposed the toast of the "Cork School of Medicine," which was responded to by Professor W. Ashley Cummins. The toast of the "Naval and Military Medical Services" was responded to by Colonel McNamara, R.A.M.C., P.M.O. Cork District, and Staff-Surgeon John Moore, R.N., while the toast of "Our Guests" was spoken to by Mr. S. H. Newsom, Hon. Treasurer of the Cork South Infirmary, and Mr. Hubert O'Keefe, L.D.S. Mr. M. D. Daly, J.P., Hon. Treasurer Cork Fever Hospital, then proposed the toast of the "Cork Medical and Surgical Society," which was responded to by the President. A number of songs and other musical items were rendered during the evening.

Deaths Under Chloroform.

An inquest was held at Nottingham last week on the body of a woman, age 32, who died under chloroform administered for the purpose of tooth extraction at the General Infirmary. The anæsthetic was given by the deputy-assistant house surgeon who said he had "great experience," but just after the teeth had been extracted the patient turned livid and the heart failed. No mention is made in the report of the method of administration or of the amount of chloroform used. The usual verdict was returned. A child, aged five months, died under chloroform at Guy's Hospital last week, while undergoing a second operation for strangulated hernia. The anæsthetic was given by the junior house physician. A verdict of death from misadventure was returned.

Suicide of a Medical Man.

An inquest was held last week by the coroner for Paddington on the body of Archibald James Bennett, age 28, who had committed suicide by taking hydrocyanic acid. The deceased was reading up for the fellowship of the Royal College of Surgeons, and nothing was elicited throwing light on his reason for taking his life. Incidentally a juryman raised the question whether suicide is to be accepted as conclusive evidence of insanity, the charitable view which coroners favour, and in the absence of any evidence as to the deceased's state of mind an open verdict was returned on that point. Fortunately the post mortem indignities formerly inflicted on persons adjudged *felo de se* have been abandoned, and four cross roads are no longer haunted as of yore.

National Orthopædic Hospital.

Mr. H. J. Tresidder having resigned the secretaryship of this hospital after more than nine years service, owing to his ill-health, Mr. Keith Anstruther has been appointed by the Committee of Management as Secretary.

Lady Health Visitor for Newport.

Miss Winifride K. Willey, of Newport, has been chosen female Health Visitor or Inspector for the borough of Newport out of twelve applicants who applied for the post.

Royal Navy Medical Service.

The session of special instruction at the Royal Naval Hospital, Haslar, terminated on October 24th. The prizes were awarded as follows:—The Gold Medal and Microscope to Surgeon Charles A. G. Phipps, late of the London Hospital; the Silver Medal and £10 worth of Books to Surgeon Stanley S. H. Shannon, late of Guy's Hospital. Surgeons in order of seniority:—

	Marks.		Marks.
Charles A. G. Phipps	4230	R. L. Jones, B.A. ...	2889
S. S. H. Shannon ...	3537	Robert H. Atkins, B.A., M.B.	2837
Charles K. Bushe, B.A., M.D.	3202	Charles J. O'Connell	2789
William R. Harrison	3141	James A. Thompson, B.A., M.B.	2756
Walter G. Edwards..	3105		
Frank E. Bolton ...	3005		

Notices to Correspondents, Short Letters, &c.

☞ **Correspondents** requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

THE CASE OF DR. RAINSBURY.

To the Editor of The Medical Press and Circular.

Sir,—Referring to the appeal made to assist Dr. Rainsbury in discharging the judgment debt and costs in the above matter, I beg to enclose a list of further contributions, and on behalf of Dr. Rainsbury and the Council of the Midland Medical Union to thank those who have so generously responded. I would add that there still remains a balance of £113 2s. 5d., towards which it is hoped that further donations will be made.

I am, Sir, yours truly,
George S. O'Rorke,
Sec. Mid. Med. Union.
Nottingham, Nov. 7th, 1902.

	£	s.	d.
By contributions already acknowledged	62	7	3
„ Dr. E. G. Leary, Alfreton...	1	1	0
„ S. J. P. and R. A. P.	0	10	6
„ Dr. J. A. Magee, Clown, near Chesterfield ...	1	1	0
„ Dr. G. Baynton Forge, Rochford, Essex ...	2	2	0
„ Drs. Nesbitt and Tweedie, Sutton-in-Ashfield	2	2	0
	£69	3	9

The proprietors of 'Scott's Emulsion" have published, for distribution to medical practitioners, a very handy and compact "Diary and Emergency Note Book" for 1903. It presents special convenience in that the diary commences in Nov., 1902, and is continued to Feb., 1904—a novel and welcome variation from routine. In addition to various items of useful information there is an insurance coupon entitling the holder to £100 in the event of death, under certain specified circumstances.

NATIONAL ASSOCIATION FOR THE SUPPRESSION OF BAD LANGUAGE.

To the Editor of The Medical Press and Circular.

Sir,—The obscene and blasphemous language now so common—even, shame to say, on the lips of women and young children—is so shocking and so revolting that you will, I trust, lend us your kindly aid in inviting the co-operation of those who may be disposed to join us in our efforts to suppress the use of disgusting and profane words, and so wipe that foul blot from the character of our people.

I am, Sir, yours truly.
Greville Walpole, M.A., LL.D.,
Secretary.
1, Finsbury Circus, E.C., Nov. 5, 1902.

An Absent-minded Professor of one of the Welsh University Colleges was observed walking down the street with one foot on the kerb and the other in the gutter. "Good morning, Professor," said a friend; "how are you?" "Well," replied the Professor, "I thought I was all right, but for the last half-hour I have been limping in the most unaccountable manner."

Meetings of the Societies, &c.

LONDON.

Wednesday, November 12th.

South-West London Medical Society (Bolingbroke Hospital, Wandsworth Common).—8.45 p.m. Paper:—Dr. B. Fenwick: Backache in Women.

Dermatological Society of London (11, Chandos Street, Cavendish Square, W.).—5.15 p.m. Demonstration of Cases of Interest.

Hunterian Society (London Institution, Finsbury Circus, E.C.).—8.30 p.m. Paper:—Mr. A. H. Tubby: Recent Advances in the Treatment of Paralytic Deformities.

Thursday, November 13th.

British Gynæcological Society (20, Hanover Square, W.).—8 p.m. Specimens will be shown by Dr. R. Snow, Dr. Macnaughton-Jones and others. Paper: Dr. Macnaughton-Jones: "The Propriety of Conservative Operative Procedures in Abdominal Cœliotomy for Adnexal Disease (illustrated by two specimens).

Medical Graduates' College and Polyclinic (22, Chenies Street, W.C.).-4 p.m. Mr. Hutchinson: Clinique. (Surgical.)—Mr. Keetley: Coxa Vera.

Childhood Society (Library of the Sanitary Institute, Margaret Street, W.).—8 p.m. Mr. J. C. Hudson: Handicraft in Connection with Education.

Harveian Society of London (Stafford Rooms, Titchborne Street, Edgware Road, W.).—8.30 p.m. Mr. A. Doran: Uterine Fibroids Considered from a Clinical and Surgical Standpoint. (Harveian Lecture.)

Friday, November 14th

Anatomical Society of Great Britain and Ireland (King's College, Strand, W.C.).—4 p.m. Annual General Meeting. Specimens by Dr. Salaman, Dr. A. Keith, and Dr. P. Thompson. Papers by Dr. R. J. Gladstone and Mr. F. G. Parsons.

Ophthalmological Society of the United Kingdom (11, Chandos Street, Cavendish Square, W.).—8 p.m. Cases and Specimens will be shown by Dr. A. Bronner, &c. 8.30 p.m. Papers:—Dr. F. W. Edridge-Green: On the Necessity for the Use of Colour-names in the Test for Colour-blindness.—Mr. S. Snell: (1) Avulsion of the Eyeball by Midwifery Forceps; (2) Paralysis of the Upper Movements of the Eyeballs; (3) Retinitis Pigmentosa in Five Generations.

Clinical Society of London (20, Hanover Square, W.).—8.30 p.m. Papers:—Dr. W. H. B. Brook: Cases illustrating the Clinical Features of an Epidemic occurring at Lincoln in May, 1902.—Mr. Mansell Moullin: Cases of Gastrotomy for Recent Gastric Ulcer.—Mr. H. McGavin: A Case of Strangulated Inguinal Hernia in which Reduction *en masse* was caused by the Employment of Taxis.

Tuesday, November 18th.

Westminster Hospital (Broad Sanctuary, S.W.).—4.30 p.m. Mr. Stonham: Surgical Cases (Post Graduate Clinical Demonstration).

Medical Graduates' College and Polyclinic (22, Chenies Street, W.C.).—Dr. Patrick Manson: Dysentery.

Appointments.

Bristowe, H. C., M.D.Lond., Medical Officer of Health for the Wrington District of the Union of Axbridge, Somerset.

Goodall, J. Strickland, M.B.Lond., &c., Lecturer on Biology in the Medical School, Middlesex Hospital.

Maguire, W. J., M.B., B.Ch., R.U.I., Surgeon to the North District of the Royal Irish Constabulary in Belfast, *vice* D. McDonnell, M.D., R.U.I.

Miller, E. J., L.S.A Lond., House Surgeon to the Tynemouth Victoria Jubilee Infirmary, North Shields.

Mole, Harold F. F.R.C.S.Eng., Honorary Assistant Surgeon to the Bristol Royal Infirmary

Rubra, H. H., M.D.Brux., M.R.C.S., L.R.C.P.Lond., Anæsthetist to the Great Northern Central Hospital.

Scharlieb, Mary Ann Dacomb, M.D., M.S Lond., Physician for Diseases of Women, Royal Free Hospital, Gray's Inn Road.

Vaughan, Ethel May, M.D., B.S.Lond., Assistant Physician for Diseases of Women, Royal Free Hospital, Gray's Inn Road.

Vacancies.

Borough Asylum, Portsmouth.—Assistant Medical Officer. Salary £120 per annum, with board, lodging, &c. Applications to the Medical Superintendent.

Borough of Colchester.—Urban District.—Appointment of Medical Officer of Health Salary £475 per annum. Applications to H. C. Wanklyn, Town Clerk, Town Hall.

Bradford Royal Infirmary.—Dispensary Surgeon. Salary £100 per annum, with board and residence Applications to William Maw, Secretary, Royal Infirmary, Bradford.

Cahirciveen Union, Glanbehy Dispensary District.—Temporary Medical Officer. Remuneration £5 5s. per week. Immediate application to Thos. C. FitzGerald, Clerk of Union. (See advt.)

City of Nottingham Workhouse Infirmary.—Senior Resident Medical Officer, salary £160 per annum, and for the post of Junior Resident at a salary of £120 Apartments, board, washing, and attendance provided in each case. Applications to G. Muncaster Howard, Clerk to the Guardians.

Middlesbrough County Borough Asylum, Marton-in-Cleveland, Yorkshire.—Assistant Medical Officer. Salary £130 per annum, with furnished apartments, board, and washing. Applications to the Medical Superintendent, as above.

Penryn, Corwall.—Ancient Order of Foresters and Independent Order of Rechabites.—Surgeon. Immediate application to R. F. Stephens, Penryn, Cornwall. (See advt.)

Warrington Infirmary and Dispensary.—Resident Surgeon. Salary £100 per annum, with furnished residence and board. Applications to J. H. J. Hampson, Secretary.

Worcester County and City Asylum, Powick, near Worcester.—Assistant Medical Officer. Salary £140 per annum. Applications to Medical Superintendent.

Births.

Basden.—On Oct. 28th, at Stanford-le-Hope, Essex, the wife of H. S. Basden M.R.C.S., L.R.C.P Lond., of a daughter.

Berry.—On Oct. 27th, at Wansford House, Watford, the wife of F. Haycraft Berry, M.D.Lond., of a son.

Dobie.—On Nov. 3rd, at 11, St. John Street, Chester, the wife of Herbert Dobie, M.D., of a daughter.

Morgan.—On Nov. 4th, at Marteg House, Westcliff-on-Sea, Essex, the wife of W. Harmon Morgan, M.R.C.S., L.R.C.P. Lond., of a daughter.

Stanford.—On Nov. 4th, at Sutton Valence, the wife of W. Bedell Stanford M.R.C.S., &c., of a daughter.

Ward.—On Nov. 6th, at 40, Berners Street, Ipswich, the wife of F. Fowler Ward, M.B., B.C., of a son.

Marriages.

Elliott—Wright.—On Nov. 4th, at St. Bartholomew's, Sydenham, S.E., Staff Surgeon Horace Elliott, R.N., son of Samuel Elliott, B.A., barrister, of Benfleet, to Mary Elizabeth, second daughter of the late George Cross Wright, of Challow House Berks.

Hartley—Stewart.—On Nov. 6th, at St. John's Church, Edinburgh, Arthur Conning Hartley, M.D., F.R.C.S.E., Bedford, to Margaret, eldest daughter of the late James R. Stewart Esq., M.A.Oxon.

Deaths.

Goullet.—On Oct. 30th, at 7, Cliff Terrace, Budleigh Salterton, Devon, Arthur Peter Goullet, M.R.C.S.Eng., L.R.C.P.Lond., late of 2, Finchley Road, St. John's Wood, London, second and only surviving son of the late Commander Charles Goullet, R.N., aged 74.

Ward.—On Oct. 27th, at St. Bartholomew's Hospital, Herbert S. Ward, M.B., B.S.Lond., M.R.C.S., L.R.C.P., of Rhiwbina, Glam., aged 25.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

Vol. CXXV. WEDNESDAY, NOVEMBER 19, 1902. No. 21.

Original Communications.

THE CONFLICT OF MEDICAL TESTIMONY IN COURTS OF LAW. (a)

By L. H. ORMSBY, M.D., F.R.C.S.,

President of the Royal College of Surgeons, Ireland; one of the Senior Surgeons of the Meath Hospital and co. Dublin Infirmary.

The conflict of medical testimony in courts of law has been for many years a matter of great moment to us all. Therefore, I need not apologise for making it the subject of my present address.

I have frequently observed in the Dublin law courts the most distinguished physicians and surgeons divided in their opinions as regards the cause, present condition, and probable future result of real and imaginary injuries or diseases. In face of the conflict of medical evidence it is no wonder that judge and jury sometimes find it almost impossible to arrive at the justice of the case. Let me give you a typical example—railway shock. Where a person complains of injury in a railway collision, a surgeon is called on, either by the alleged injured person or by the railway company, to express his opinion. He must consider the case from at least four aspects:—

1. As to whether the person complaining has really been injured at all.
2. If injured, what is the nature and extent of the injury?
3. Whether the injury is permanent, or likely to be permanent?
4. If not permanent, when will restoration be ensured?

As regards the first point the great difficulty depends upon what position the surgeon holds to the alleged injured person, whether he is the usual medical attendant, or whether he is engaged in the interest of the railway or other defendant company.

If he is the usual medical attendant of the patient his task is less difficult. The patient will inform him without reserve concerning everything connected with the alleged injuries, and from previous knowledge of his constitution the surgeon will have ample opportunity of comparing accurately the patient's present condition with his state previous to the accident, and from his personal intimacy with the patient he will be in a position to estimate any overstatement of his sufferings.

On the other hand, where the surgeon is the recognised medical adviser of the railway company, or he may happen to be called in for the occasion to protect their interests, his tasks and duties are not nearly so simple. In accordance with professional etiquette he cannot visit the patient unless in the presence of or in consultation with the patient's medical attendant.

This usage is, of course, right in the main, but it has disadvantages. It often leads to inconvenience and loss of time in order to arrange an appointment that will suit all parties concerned. Secondly, when the patient has been made aware of the projected visit he prepares himself for the ordeal in great excitement, describing his sufferings in such a striking and vivid manner and with such minute detail as to compel the medical examiner to use all the knowledge and sagacity he possesses to distinguish whether what has been detailed to him is real, feigned, or exaggerated. Hence it has occurred to me, and doubtless to others of my brethren also, that the cause of truth and justice would be better served, in some instances at least, by leaving it to the surgeon to exercise his own discretion in visiting without notice certain patients alleged to be suffering from injury. Then, and only then, will he see the patient in his natural or real state. Such visits I feel certain would help greatly to distinguish the cases of feigned from those of actual injury. In support of this view I can cite eminent authority.

Mr. Erichsen, referring to the conduct of railway surgeons when visiting a patient on the part of the defendant company, suggestively observes "The patient is not yours—he probably does not wish to consult or even see you. Perhaps you are admitted to an interview with him and to an examination of him only after consultation with his solicitors and by their consent, or in virtue of the judge's order. He most probably looks upon you as being hostile to him and as coming with a view to making light of his misfortunes. Hence you will usually have but few opportunities allowed you of seeing the patient, generally only once, at most, twice or thrice. He is always prepared beforehand for your visit, he is excited, annoyed, or apprehensive with respect to it. You do not consequently see him in his usual frame of mind, and the mental disturbance thus occasioned may react injuriously upon and greatly aggravate his physical ailments. Above all you have no opportunity of taking him unawares and unprepared when your visit is expected, because, if unexpected, you would have a good opportunity of judging whether this symptom or the other really existed, or if it existed to the alleged extent."

Speaking from personal experience, I have occasionally gone with the medical attendant of the patient without previous notice of my intended visit having been given and the information gained under such circumstances has been at times remarkable. In one instance, when we entered the room the patient was sitting on a chair. He received us pleasantly in a laughing, joking manner, not having the least suspicion that I was the railway company's doctor. The moment he was informed who I was and the nature of my visit the whole aspect of his face suddenly changed. Instead of a pleasant, open countenance, he assumed a sullen, dark, dejected look, and seemed greatly annoyed that he had been taken unawares. In another instance where my visit was expected, before my examination was over I was convinced I had to deal with a case enormously exaggerated, for the injury the man had received was so slight as to be incompatible with the symptoms described by the patient himself. The patient was so determined to aggravate and exaggerate his symptoms that for many months he prepared himself —by a continued invalid régime, and nursing his injuries mental and physical so that his imaginary ailments, grew into stern realities—so that he became a confirmed wreck, all for the few hundred pounds he received as compensation. This man managed his case so well that he deceived his own medical attendants to such a degree that they were indignant when I ventured to suggest that some of the symptoms complained of were exaggerated. On another occasion I paid a visit on behalf of an Accident Assurance Company to a gentleman who it was alleged had received very serious injuries by falling off his bicycle in a collision with a car. It was alleged that this gentleman was in bed. On arriving at his house and asking who was his medical attendant. I found he had no medical man attending him. that he was not at home, but was that day out shooting on the Dublin mountains.

(a) Presidential Address read at the Opening Meeting of the Surgical Section of the Royal Academy of Medicine in Ireland, Nov. 14th, 1902.

Of course, I am not suggesting that severe and permanent injuries do not take place as well as other accidents. I have on many occasions attended patients who have been severly injured. But I do say that one of the greatest difficulties in a medical man's investigation is to distinguish between real and feigned injuries. Hence the regretable conflict of medical testimony in the law courts. I have heard advocate's comment upon it as derogatory to the members of a noble profession and as calculated to defeat justice. An honest difference of opinion is quite another matter, but it is the direct conflict of evidence as to the presence or absence of serious symptoms in obscure cases, like railway shock or railway spine that lead the public to conclude that doctors will expand or contract their powers of observation as to diagnosis and prognosis according to the interests of the side for which they are paid.

In this city, when an important case of personal injury is to be tried in the law courts, the solicitors retain the services of a powerful Bar, usually three K.C.s and a junior on each side. Next to securing the Bar the question of medical witnesses crops up. Counsel directs the solicitor to have a consultation with the medical attendant, with the result that the doctor recounts what he knows. Senior counsel may think his evidence is weak and will not influence a jury or that he is not sufficiently known. Accordingly some leading surgeon is frequently retained to back up the medical attendant's opinion. This gentleman is approached by the solicitor. The fee is arranged, and his attendance is secured to give evidence for the plaintiff. The moment the defendant company learns that an eminent medical witness has been retained their solicitor is put in motion to secure an equally eminent medical expert to give evidence on their behalf. Then it is sometimes thought desirable to have another medical man on behalf of the plaintiff. This is no sooner known than the defendant company in like manner engages the service of yet another doctor. Thus the case comes on for trial. The leading medical witnesses are heard on each side, Hard swearing takes place, resulting in conflict of testimony. How does this affect the court? Lord Coleridge says, "Such conflicts of scientific opinion are puzzling to a judge who knows little, and to a jury who probably knows less, of science."

His lordship, it may be observed, omitted all reference to the knowlege of medical science possessed by the Bar, but it probably would be only fair to assume that it does not occupy a higher standard than that at which the learned judge so modestly places the acquirements of the Bench.

Conflict of medical opinion in courts of law I know gives persons who are inclined to speak slightingly of the profession an opportunity to misrepresent the real point at issue, as regards the difference of opinion, which frequently is more apparent than real. Indeed, I feel certain that it occurs much less frequently than is represented. Mr. Erichsen thinks that in at least 90 per cent. of all cases of surgical injury in which claims for compensation are made there is perfect accord between the medical men concerned as to the nature, the extent, and the possible duration of the injury. Such cases as these are necessarily settled out of court, and as they do not become the subject of judicial investigation they do not attract the attention of the public in the newspapers. In the small remainder of the cases, not amounting to one-tenth of the whole, a discrepancy or conflict of opinion takes place which is not as a rule with respect to the facts of the case, but has reference to the possible pathology, the ultimate extent of the injury, and the probable duration of the symptoms. When we consider that these injuries are chiefly lesions of the brain and spinal cord, affecting organs and structures the pathology of which is not as yet accurately determined, and consequently is less understood than that of any other part of the body, we cannot feel surprised that there is an occasional want of unanimity even among men who are exceptionally well-informed on the subject of the injuries and diseases of the nervous system.

In every department of life conflict of opinion occurs. In politics, religion, engineering, chemical and biological science, and in the law itself to at least as great an extent relatively as that which is met with in medicine and surgery. Let us see, then, to what extent conflict of opinion occurs in the law courts among the members of our own profession.

There are three classes of medical witnesses who appear in the small proportion of compensation cases which in the end drift into courts of law.

First, there is the *bona-fide* medical attendant of the case. Secondly, there is the recognised medical officer of the railway or other company. And, thirdly, there is the consulting surgeon or medical expert called in from his acknowledged acquaintance with the subject of the injury alleged to have resulted in the case at issue. The first two witnesses detail the actual facts, the present condition, and the various symptoms and signs observed by them or ascertained after careful examination, and the weighing of the objective and subjective symptoms present. As a rule there is not much difference of opinion between these witnesses. The conflict of testimony generally appears among the "experts" called on either side to testify as to whether the injury complained of is feigned or real, and if real, the probable duration of the lesion and the future effect it may have on the patient. I have already stated how these experts have been brought into the case, namely, that their services have been secured by the litigants themselves to give evidence. I think medical experts ought to be nominated by the Court, and paid under the directions of the Court.

I agree with Mr. Erichsen when he says "The method of appointing experts is radically wrong and is productive of many evils." A medical man who is retained and paid by a litigant, being only human, does not see why he should not earn twenty or thirty guineas for his opinion when opportunity occurs. With the purest intentions possible, unconsciously, almost instinctively, he is apt to become biassed in favour of the side he is called upon to support. He is inclined to look for the strong points on his own side and the weak ones on that of his opponents. It is fatal when a medical witness becomes an advocate. He should be in a position to guide the court in the direction of what he believes to be the truth. Conflict of opinion among surgeons as regards actual facts rarely or ever occurs in cases of pure surgical injury, such as fractures, dislocations, ordinary wounds, but it is as to the deductions from admitted facts, and the opinions that may be legitimately based thereon, that different views are expressed. The difference of opinion thus conveyed appears to a non-medical tribunal to be much wider than it really is. It is often, as has been said by Mr. Erichsen, rather a difference of degree than an actual divergence of opinion as to actual conditions, and if the case were tried before a tribunal possessing the requisite amount of medical knowledge to form an independent judgment, these differences would be narrowed to a very slender line, if not reconciled. Sometimes discrepancies in scientific opinion cannot be explained away, or due value assigned to conflicting statements, in consequence of the want of scientific knowledge on the part of the tribunal before which the case is tried.

How is it possible, to quote Lord Coleridge again, for a judge who knows little of science, and a jury who knows less, to form a trustworthy estimate of the scientific medical evidence that is brought before them? This is especially the case when that evidence relates not to matters of fact but to matters of opinion on some of the most unsettled problems in physiology and pathology, namely, those connected with the functions of the brain and spinal cord.

What would be said if a leading physician or surgeon, having little or any real knowledge of law, were asked to try a case involving some of the most intricate, obscure, and complicated questions in the law of real property? Suppose before him several King's Counsellors, debating those questions from opposite standpoints. Would it be possible for him to come to anything like a trustworthy conclusion, or one that would be satisfactory to the members of the Bar? In the ordinary arbitrations for the compensation to be paid for lands compulsorily taken questions of law arise, and the arbitrator is entitled to have a legal assessor to guide him.

Surely the cases are parallel; on the one hand, the judge who knows little of science in a case which teems with scientific and technical possibilities of the most obscure character; on the other hand a surgeon who knows less of law dealing with a legal problem.

Therefore it is that I respectfully suggest that the court in actions for personal injury should be assisted by a medical assessor of undoubted knowledge and eminence who would assist the judge, enabling him to weigh and estimate the true value of the expert evidence given *pro* and *con*. If in the Admiralty Court it has been found desirable for the presiding judge to call to his assistance two nautical assessors who have practical knowledge and experience in navigation where there is a question of responsibility for a collision, how much more should it be necessary for a judge in cases of railway shock to call to his assistance medical assessors selected and paid under the direction of the court who are above and independent of the contending sides, and who could weigh all matters of medical evidence at their true value? So strongly did the Council of the Royal College of Surgeons in Ireland think on this matter that last year several discussions took place. On March 7th, 1901, notice of motion was given in these terms:—

"That the Council of the Royal College of Surgeons in Ireland is of opinion that the conflict of medical testimony so often apparent in the law courts is derogatory to the profession and is frequently subversive of justice. The Council therefore consider it desirable on public grounds that provisions somewhat similar to those already in force under the Workmen's Compensation Act, 1897, should be made for the appointment of independent medical referees in all cases in which there is likely to be a conflict of medical testimony where suitors seek compensation for personal injury."

A sub-committee of the Council was appointed to consider the matter, and their report came up for discussion at the Council meeting April 2nd, 1901. They recommended the adoption of the following resolution;—'In cases of actions for damages for personal injury, the Council of the Royal College of Surgeons in Ireland is of opinion that the court should obtain an independent surgical opinion, having regard to the necessary technical nature of surgical evidence, especially in cases of alleged injury to the spine."

After considerable discussion, the Council unanimously adopted a resolution in the following terms:—

Resolved,—"That the President and Council of the Royal College of Surgeons in Ireland having regard to the necessarily technical nature of medical evidence, are of opinion that in cases of actions for damages for personal injuries, the court should obtain the assistance of a medical expert other than those employed by the parties in the suit."

This resolution was printed and a copy sent to each of the judges of the Supreme Court of Judicature in Ireland. But, so far as I am aware, the judges have never replied to this communication.

The action of the Council is not generally known. Perhaps this is the first *quasi*-public intimation. The administration of justice is at all times a subject of public concern. Hence I respectfully venture to hope that the suggestion of the Council of the Royal College of Surgeons, a suggestion which tends to the dignity of the medical profession and to the promotion of the ends of justice, will be duly considered by his Majesty's judges in Ireland and England at an early date.

GASTRIC ULCER. (a)

By F. J. SMITH, M.D., F.R.C.P.,

Physician to the London Hospital.

Everyone is familiar, both by reading and possibly by actual experience, with the two common forms of definite ulceration of the stomach, *e.g.*, the small punched-out so-called peptic or acute, and the large indurated or chronic, but I do not think we have been so alive to what I believe to be a third form. My own experience of this third form has led me to attach very great importance to it. The first case that attracted my attention occurred some ten years ago; it was that of a man about forty-five or fifty years of age, who came to me at the City Road Chest Hospital with all the symptoms and physical signs of pulmonary phthisis. I gave him medicine, and told him to see me again in a fortnight. About five or six days later his friends came to see me and said that he had suddenly passed a large quantity of blood per rectum and died. I asked for and obtained a necropsy. The phthisis was there right enough, of an ordinary type, but the intestines from stomach to anus were full of blood, the exact source of which was at first quite inexplicable, as I could discover no gross lesion in the stomach (its obvious *primary* source); closer scrutiny of the viscus, however, showed me at the cardiac end a hole, about the size of a ordinary pin's head, leading directly into a small vessel; beyond the hole or round it there was no trace of any ulceration visible to the naked eye. At the time I thought I had possibly a peculiarly-situated single focus of tubercle to deal with, and allowed myself to say that I had seen a case of tuberculous ulcer of the stomach. I removed the piece of the organ with the hole in it, and intended to have sections cut; but unfortunately the specimens got lost, and so the case remained really unexplained till further evidence accumulated of what I now believe to be its real nature.

(a) Abstract of an Address delivered before the East Surrey Branch of the British Medical Association at Reigate, October 9th, 1902.

During the last three or four years in the post-mortem room I have found in at least two or three persons, in whom there was no suspicion of tubercle at all, a precisely similar condition. The history of the last one, by the kind courtesy of Mr. Rigby, I am enabled to give. The body was that of a girl, æt. 22, a barmaid. Her previous history is unattainable; but so far as the notes go they are not incompatible with the supposition —they do not specifically state that it was so—that she was one of that very common type of anæmic girls who suffer from indigestion and pain after food; at any rate she was admitted, looking very blanched, as a case of gastric ulcer with hæmatemesis, and transferred at once to Mr. Rigby for operation. The history of her present acute illness was as follows:—She had had a bilious attack on Thursday, vomited a pint of blood on Friday, is said to have had several fainting attacks on Saturday and Sunday, and on Tuesday vomited another half-pint of blood, so that there was a reasonable suspicion that she would bleed to death if something radical were not done to check the hæmorrhage. Mr. Rigby operated. The notes run—"No ulcer was found, but a villous looking patch about the size of a shilling was found, from which the blood seemed to be coming; this patch was sequestrated by a purse-string suture, &c." (From my immediate point of view the surgical procedure is of no particular interest.) At first she did well, but suppurative parotitis supervened with œdema of the glottis, necessitating tracheotomy. She struggled gamely with these difficulties, but on September 24th she vomited blood again, and died on the 25th. At the post-mortem I found the surgical situation perfect so far as the stomach was concerned (except that the sutures were unabsorbed and, indeed, unaltered—a point for surgeons to note). The wounds were healed perfectly, and the old affected region effectually sequestrated; but near the pylorus, some inches from the old spot, was a small pin's-head-sized hole leading directly into an open vessel, with no trace to the naked eye of any ulceration or swelling, or other pathological condition than a simple solution of continuity in the mucous membrane. The histories of the other cases differ a little from this one, but the post-mortem appearances were identical in all. Such is my definite evidence of facts from the dead-house, but in the living the evidence is nearly as strong

For the last four or five years Mr. Moullin has operated for me upon several cases of gastric ulcer, the operation being demanded for various reasons which we may discuss later—perforation, suppuration, hæmorrhage, life a burden, &c.; but among those upon whom he has operated for hæmorrhage it is very noteworthy—and I believe his experience coincides with that of all my surgical colleagues—how frequently he has to report, "I found no ulcer, but only a small hæmorrhagic or petechial-looking spot."

I am, therefore, on this evidence forced to the conclusion that this erosive form of ulcer is of much more frequent occurrence and of much more clinical importance than has been generally admitted, for I believe that it is the condition which is primarily at the bottom of all cases in their early stages; that, in other words, it is the starting-point of most, if not all, ulcers of the stomach of any form whatever.

It must be in the experience of all to have met with cases in which all we have been able to say at first is, that dyspepsia is present, and the dyspepsia has later on been followed by severe hæmatemesis, and possibly by all the classical signs and symptoms of ulcer. Can we, in the light of my present text, avoid such incidents? I fear I am obliged by practical evidence to say that in ordinary life such incidents or accidents will, and must, remain inevitable in a certain proportion of cases, for it is impossible to send every patient to bed for even two or three days who comes complaining of indigestion, and yet that is what the position comes to mean if we would act with absolute safety; for I am quite convinced that patients with these erosions do not complain at first of anything but the mildest symptoms of indigestion. Time after time I find, on looking up my old notes of cases of hæmatemesis that, even on the most careful inquiry, a little wind or fulness after food, a good preliminary appetite too easily satisfied, slight pain sometimes at once, sometimes delayed for an hour or so after food, are all that has ever been noticed. Such patients are not fit to be very thoroughly tested in regard to localised pain on pressure; but when I make the statement "that when erosions only are present there is no localised tenderness on pressure, only a generalised tenderness of the whole epigastrium, that when a definite gross ulcer has been present there has been this localised tenderness," I am not stepping outside any actual observations noted down, though I am quite willing to admit that it is based more on negatives than on exact positives; a risky position I admit, but one which can lead to no harm, and may help to the avoidance of accidents in some few cases. The position I take up is this, when we see a patient between, say fifteen and forty, complaining of indigestion without any definite exciting cause, we can neither affirm - without hæmorrhage—nor deny the possibility of erosions being present; and if we remember the possibility, we shall be inclined, whenever it is at all practicable, to send the patient to bed for a few days, and either starve him (or her more frequently) completely, or feed on pulp and slops. If hæmorrhage has occurred in a case with short duration of symptoms, I go so far as to say that erosion is the most likely condition present. We must, however, take the elements of diagnosis and consider the various groupings of them, for it is in the association and linking together of the symptoms, the symptoms complex, rather than on the individual items, that diagnosis mainly rests. The items themselves are: 1, Age; 2, sex; 3, pain or discomfort; 4, hæmorrhage; 5, perforation; 6, duration (*a*) over a length of time, (*b*) in an attack; 7, severity of symptoms complex; 8, local tenderness; 9, vomiting, and the nature of the vomited matter.

It would occupy too much time to follow out every possible combination of these, but I think we may usefully consider some of the various diseases known to occur in the abdomen which require to be distinguished if we would treat our patients on any rational basis.

It may seem rather far-fetched to suggest that a movable kidney may simulate gastric ulcer, but on at least three separate occasions I have had some difficulty in determining how much of the pain after food, and the nausea in youngish women, was due to movable kidney, which was undoubtedly present, and how much to a pathological condition of the stomach.

Acute gastritis practically never occurs (under circumstances that necessitate differentiation from ulcer) in young subjects without a fairly obvious cause in the shape of too much "lobster salad" or something obviously irritating to the stomach. It is sudden in its onset, and associated with much nausea and retching; points in which I am led to believe it differs from gross gastric ulcer, though possibly resembling multiple erosions. The appetite is in abeyance from utter distaste for food, whereas in gastric ulcer the appetite may be good.

A bilious attack I cannot define as I am rarely in a position to see one, but in adults my impression is that it is the same thing as acute gastritis, and the "bilious" part of the name has arisen from the sole fact that the vomit becomes almost pure bile, owing to *anti*-peristalsis reaching the duodenum. In young persons I believe a condition does exist which has the same phenomena during its presence as those of acute gastritis in adults, but it is brought on by very slight causes indeed, generally of a reflex—not direct gastric—origin, a sort of neurosis allied in its primordial nature to epilepsy, the distinguishing feature being the history of a "delicate stomach" quite from early childhood or even infancy. The severity of the attacks begins to diminish at the age of, say, fifteen to twenty, when ulcers begin to intrude into the diagnostic horizon. Accepting, as I think we must, the existence of such a disease as acid dyspepsia, the following constitute its symptoms complex. The patient is an adult, say from thirty to fifty; pain rarely or never comes on till two or three hours after food; it is much, and that almost at once, relieved by vomiting, and it is also relieved very rapidly by the ingestion of some food or plain liquid diluent. It requires to be separated from chronic gastric ulcer, which I think can usually be done by the *combination* of the presence of intense general pain and the absence of a lump to be felt, or local tenderness to be elicited. If a chronic ulcer should complicate it, then dilatation is likely to be a marked feature.

Prognosis is always so bound up with treatment that it can hardly be discussed apart from it. To prevent confusion and repetition in the discussion of the treatment of gastric ulcer, we must take it in separate divisions.

The first group I make from this point of view is a very large one, viz., those cases in which dyspepsia is the prominent feature, but in which there are no certain indications, such as hæmorrhage, to give a strong lead. Taking the young anæmic girls first, I have never yet found a case which was not improved by iron given at once, provided the tongue was not badly furred. It is generally stated that the stomach should be cleaned up by bismuth, &c., before iron is given; but I cannot say that this accords with my experience, with the sole proviso regarding the tongue mentioned above. I do not think this group, whether anæmic or not, offers any new or special features in treatment for me to advance; but the rapid subsidence of all trouble directly the patient goes to, and remains in, bed is little short of miraculous, and it is this fact which makes me say that, whenever it is in the least degree possible, young patients with indigestion without a very definite exciting cause, or even with one, should be put to bed. The next question is, When should we let such a patient get up? I believe that the stomach will heal from erosions as rapidly as a throat will heal from congestion, and that in three or four days it is probable that danger is past, but if any doubt still lingers in your mind, there is a very simple plan that I learned from the practice of Dr. Samuel Fenwick, viz., to get the patient to swallow a little salt solution (ʒj. of salt, ad. ℥ij of water) in the morning on an empty stomach; if there is still any raw place this will cause a good deal of temporary pain, and will also serve to show whether the condition has passed on to actual gross ulceration or not, and whether, if it has, the ulcer has healed. The pulpy diet, with which you are all as familiar as I am, I pass over with only one remark, but that one I wish to make as emphatic as possible: raw milk should not be given alone; junket, broken-up custard, soft bread and milk, &c., may be given in small quantities at a time, but the patient must not be allowed to drink ordinary raw milk, owing to the large, hard (for the stomach) curds that are produced.

The second group is a very different one to discuss from the point of view of treatment, and I may at once say that I do not think we have yet sufficient experience to dogmatise on it. The group itself is that one in which we feel sure that an acute ulcer is present, and it has three separate types:—(*a*) Ulcer diagnosed by local tenderness, &c.; (*b*) Ulcer diagnosed by hæmorrhage; (*c*) ulcer diagnosed by perforation.

Type (*a*) must be put to bed and treated, so far as general management is concerned, absolutely on the lines of the first group. One principle here, however, I might emphasise, as I have come to regard it as a vital one, and that is if vomiting is a prominent feature, we must give the stomach absolute rest—water and medicine are the only possible exceptions—and starve the patient even for four or five days; in acute cases nutrient enemata may be administered, but I think they do very little good. Food excites retching, which is bad for the patient and for the ulcer. When, after starvation, food is resumed, dry food is the best - a dry crust or a biscuit, which cannot be swallowed till thoroughly masticated. The main thing is to throw to the winds any idea of regular meals or feeding; but let the patients nibble a biscuit or crust, restricting them very rigidly in quantity. As regards drugs, nitrate of silver has given me as good results as anything else, but doubtless bismuth is very valuable. If the patients do not get well in fourteen to twenty-one days, they are very liable to drift into my third group.

Type (*b*).—It is really on the treatment of hæmorrhage from the stomach that opinions will probably differ most. No one, I suppose, would suggest any active surgical procedures in a first attack of hæmatemesis—it is astounding what a large amount of blood may be lost, and yet the patients almost invariably do well; but when the hæmorrhage is repeated a second, third, or fourth time, and death seems to be almost inevitable if the bleeding vessel be not secured, it is then that the surgeon must step in. On percentage results of these cases compared with the non-operated ones the question must ultimately be decided. I doubt if it is possible to lay down any hard and fast rule, so much depends on the condition of the patient at the time; but if I am to formulate a rule, it would run something like the following:—"If a patient has had three serious hæmorrhages within, say, five days to a week, and during that time the pulse has very markedly increased in frequency, we ought to advise surgical measures."

The direct medical treatment consists in bed and absolute rest of mind and body, for which purpose I am sure opium is the best drug; it must be pushed freely, say five or six minims every hour, till the patient is well under its influence, and then in doses sufficient to keep him so. Nothing in the shape of food must be given; but water or ice, at the request of the patient, may be given in small quantities. I think any of the direct astringent and constringent drugs may be useful, but I doubt the wisdom of ergot unless given in very large doses. Extract of suprarenal seems to give good results in some severe cases, as it would appear to have a marked local as well as distant action.

The third group includes cases in which there is a history of at least a year's duration of what the patient calls severe indigestion, including possibly, hæmatemesis, severe pain in the abdomen, and probably some vomiting It is very important in this group to make up one's mind whether one has to deal with a gross organic lesion of the stomach or with functional trouble only (acid dyspepsia, &c.); but for my present purpose we must assume that the former is the case. What, then, are we to do? The first thing is to ascertain what treatment has already been employed, because the cases may be divided into those that have drifted while under treatment and those that have drifted without seeking professional advice. If, on inquiry, we find that the patient has not been to bed and remained there for at least two weeks, he must be sent there and treated carefully in the same way as in the first group. Further procedures will depend on—(1) The results obtained from such method of treatment. (2) What is found: (*a*) a contracted stomach; (*b*) a dilated one; (*c*) a lump. (3) The inclinations of the patient derived from the amount of local crippling. (4) Accidents—hæmorrhage, perforation, vomiting.

If hæmorrhage occurs in this chronic form of ulcer, I think operation is as distinctly called for as it is when perforation has taken place.

If we find a contracted or dilated stomach, it seems to me equally imperative to offer the patient the relief which operation will bring, and which, in the nature of things, cannot be permanently afforded by medical measures. Lavage may relieve for a time, but not for long. If we cannot find any gross evidence of permanent mischief, and have to trust to the complaints of the patient for our diagnosis, it is then our duty to try and relieve these symptoms by medical means first. Lavage is the most important procedure for doing this, as it will frequently give relief for a long time. Of drugs I have obtained the most marked relief from bicarbonate of soda, forty grains in a wineglassful of water, about four hours after a meal. Listerine (a drachm in a tumbler of water on an empty stomach) I have known also help very materially. But it is not much use pouring drugs into a foul stomach filled with fermenting food. If, however, a chronic ulcer be present, *i.e.*, if the case be not one of acid dyspepsia, I believe that any and all medical measures will eventually prove ineffectual, and ultimately the patient must choose between an operation and a condition of constant misery and pain. It is this that renders accurate diagnosis so important.

THE PROPRIETY OF CONSERVATIVE OPERATIONS IN CERTAIN CASES OF ADNEXAL DISEASE DEMANDING ABDOMINAL CŒLIOTOMY.

ILLUSTRATED BY SPECIMENS. (*a*)

By H. MACNAUGHTON JONES, M.D., F.R.C.S.I. and Ed.

The question as to whether we have not exhausted the lessons which the exhibition of pathological specimens illustrative of the diseases of the pelvic organs of women can possibly teach, sometimes forces itself upon us. Has not every conceivable morbid process or change been illustrated and discussed until further inspection of the same states is only a waste of time and a vain repetition of teachings and arguments which are intended rather for our personal glorification and advertisement than for the only excusable object in advancing them—namely, the progress and advantage of the art or science under the ægis of which a society exists? I fear most of us must plead guilty to the soft impeachment.

Let me say a word or two on this subject before entering upon the discussion of a point of practical moment in gynæcology, which the two specimens I show illustrate. The present state of gynæcological knowledge, both in its theoretical and practical aspects, is anything but complete. True, some parts of the art are apparently crystallised, and the final type has seemingly been arrived at, but others are yet in the transitional and modifying stages, and many more are in the cruder colloidal condition. Many examples of this fact will occur to you, and it is not necessary for me to do more than briefly refer to a few of them. The statement applies equally to the etiology, the pathology, the therapeutics, the clinical handling of, the operative measures applicable to, and the correlative morbid conditions and associated organic changes of, such conditions. Instance the etiology of fibromata of the genitalia, the pathology of various mixed benign and malignant processes, the therapeutics of disorders of menstruation and vulvar and vaginal diseases, the clinical aspects of different forms of endometritis, the operative measures to be followed in certain cases of cancer of the uterus, pelvic suppurations, and displacements of the uterus, while there also remains a vast field for investigation in the study of the *associated* diseases which precede, accompany, or follow, affections of the female genitalia. This latter study does not merely include such questions as the clinical and pathological relation of appendical to ovarian inflammations, the spread of tuberculosis, the contrast of the spread of sarcoma with that of cancer, the influence of disease in the adnexa of one side on the health of the other, but it also embraces the legion of reflex clinical symptoms, if not pathological changes, which are associated with diseases of the genitalia, whether in the great viscera, or in the nervous system. These are some few examples of the truth of my assertion that the resources of gynæcological investigation are far from being exhausted.

This being so, I think you will agree with me that the elucidation of such problems is more surely affected by the careful examination of the morbid parts removed by the operator himself, who can throw the most certain light on the natural position, appearances, anatomical connection, and the difficulty of removal of such growths or affected organs. On the other hand, I think the casual examination and haphazard expression of opinion on diseased structures, mutilated in the removal, altogether altered by their mode of preservation, and without any accurate clinical record of the previous history, generally does more harm than good, is retrogressive rather than progressive in its effects, and in a society tends rather to demoralise its scientific atmosphere than to impart an invigorating influence to those who take part in its debates. I say this here because, when asking Fellows of our own Society to bring specimens of interest, I have frequently met with the reply, "Oh yes, I could bring specimens, but what is the use? The exhibition of specimens is played out." On the contrary, I maintain that there is hardly an operation *justifiably* performed in which a morbid growth, organ, or structure is removed, which does not afford some useful clinical or therapeutical lesson, and still more certainly a pathological one, worth learning. Such lessons are accentuated by the previous careful investigation of the parts removed, and by their subsequent exhibition.

I now come to the matter on which I wish to invite your views to-night—namely, how far does the natural desire on the part of the surgeon to remove as little as possible from the pelvis, militate against the future happiness of the woman and increase the risk to her life? To-night I must strictly limit the field of inquiry to one single group of conditions the surgeon has frequently to deal with, and narrow the discussion down to this. I mean the operative procedures necessitated when we are compelled to perform *abdominal* cœliotomy for adnexal disease. I am not referring to colpotomy, though doubtlesss many remarks I have to make will in a degree bear on the vaginal operation also. A word is necessary with regard to the whole question of cœliotomy for adnexal disease, threadbare as that question is. I shall only touch upon it here as it bears on the subject I am dealing with.

I suppose we all come under one of four heads in our daily actions of life. Though it does not infrequently happen that in the elaboration of the mental impulses of many of us composite forces are at work, still, the preponderating material present in the gradual construction of the character of the man gives to that character the aspect which we denominate and differentiate as knavery, folly, ignorance or honesty. Doubtless, as in geological strata, there are intercalations (transitional and intermediary states) in which one phase of our nature passes by imperceptible gradations into the other—the strata of the knave into the intercallary formation of the fool, or the looser bed of the latter into the solid rock of ignorance beneath.

At times, in searching with our exploring hammer through the complex formation and ramifications of human character, we are too apt to conceive of and seek for in others imaginary and impossible combinations, and, disappointed in the search, to damn altogether the subject of our hypercritical investigation.

You say, "Where in the gynæcological formation does the stratum of honesty come in? Is this species extinct?" The attitude of some suggests to us the answer that the pure quartz of honesty, untainted by any of these more strictly human elements, is only to be found in the gynæcological physician who deprecates operative interference in cases of adnexal disease, and piously talks of mutilation, risk, rest and change of air. To some of us this may have the same resemblance to the *bona fide* substance we are seeking as one of the Faulkner diamonds or genuine old paste has to the real stone, and if we could merge Pecksniff and Micawber into a compound term we might give it that name as a definition. "Pure ivory," said the late Lord Lytton in one of his "Fables in Song," "fares no better than mere bone." And surely the osseous tissue of the genus elephas gynæcologicus is used to serve up on special occasions, and made to do duty as a substitute for the ivory of his tusk. Rare, however (as some would still have the world believe), as it is to find an honest operating gynæcologist, still we may, by a stretch of

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(*a*) Read before the British Gynæcological Society, November 13th, 1902.

generosity, conceive that a few exist, and I must tax the exercise of your liberality to-night in asking you to concede to me that, however contaminated I may be by the "sacra auri fames," by thirst for reputation, love of experiment, and that professional bias that Herbert Spencer has so well depicted as influencing all professional men, from archbishops and lord chancellors down to gynæcologists, still, I am, as Tennyson puts it, so far as "may be consonant with mortality," honest in the arguments I put before you. Further, I ask you to believe that in some of these I am moving in a direction contrary to my own bias and past beliefs.

I shall place the subject before you thus:—In the first instance, we will ask what is our present position as regards risk to life in abdominal cœliotomy—(*a*) in uncomplicated cases, (*b*) in complicated. By "uncomplicated," I mean plain, straightforward cases in which the operation can be completed without any unusual risks from adhesions, hæmorrhage, the presence of septic fluids, or such a low state of vitality or deficient vital resistance as to render the risk of any operative interference disproportionate to its severity. By "complicated," I understand those cases in which the operator meets with old and extensive adhesions, and organised attachments to surrounding parts, the presence of septic fluids, the prolongation of an operation in consequence of the complications being bilateral, the extra shock involved both by this and possibly by hæmorrhage and difficulty met with in delivering the tumour. To these unpropitious conditions we may add the temperament of some patients, restless, apprehensive, hysterical and impatient of pain. In the first class of case I do not think that it is exaggeration to say that the mortality (with our improved methods) of simple salpingo-oophorectomy is not more than 1 to 2 per cent. For my own part, taking all the cases of salpingo-oophorectomy I have performed (I cannot say how many) complicated or otherwise, I have only lost one, and that I attributed partly to some operative bungling. The patient had been ailing for years; had mitral valvular disease, and was very anæmic. There was adnexal trouble, and it was associated with great agony. In consequence of her cardiac complication I put off operation. At last there was no alternative, save operation, and I removed a blood-sac from the right side, and found another similar sac at the left. Both were bound down by adhesions. In freeing these and in bringing the adnexal mass to the surface I had great difficulty, and was tempted to seize the tumour with a tenaculum. In the effort I must have pierced a large venous sinus in the broad ligament. Immediately the pelvis filled with blood, and I had the greatest difficulty in arresting the hæmorrhage. I left a Miculicz tampon in the pelvis, and a temporary clamp. There was no further hemorrhage, but she never recovered the shock. This has, so far, been my first and last death from salpingo-oophorectomy.

If now we endeavour to determine the percentage mortality in the complicated cases, we have a difficult task. Tait said that oophorectomy might be one of the simplest and easiest, or one of the most difficult, operations in surgery, and so it is. Still, I do not think that we can assign a larger mortality, even in complicated cases, than 5 per cent. Is there any operative procedure of equal severity in the whole domain of surgery of which more favourable results can be quoted than this? I am ignorant of any.

Bear in mind that the great majority of these operations are undertaken for utterly incurable conditions, or, at the best, in states where there are smouldering volcanos ready to burst into activity at any moment under the slightest provocation, and commonly rendering the woman's life a misery to her. This, then, is our position to-day in regard to salpingo-oophorectomy—it challenges competition with any other surgical major operation for rapidity of execution, speediness of recovery, and completeness of cure. Personally, I should let no sentimental considerations or problematical sexual consequences stand in my way of rescuing a woman from misery, or saving her life—she knowing to the fullest the consequences of the step about to be taken and acquiescing in its completion. It goes without saying that gratifying results only follow from the most thorough and complete operations. "The opprobrium of all such operations in the future," said Tait, "will lie in their incompleteness." In another generation or two, when most names in British gynæcology are forgotten, or at the best, remembered only as those of commonplace workers, that of Lawson Tait will be regarded as one of the earliest landmarks in the evolution of this branch of pelvic surgery.

There must ever be a large proportion of cases in which the complete removal of both adnexa is indicated. Cystic and other tumours, pus cavities and sacs, if present, immediately determine this. There is another class in which the examination of the unaffected adnexa on one side proves them to be normal and healthy, *and in which no question of their removal can arise.* There is a third where partial disease affects the tube or ovary, or both, either on the one side or on the two. The question I wish to raise to-night is, How are we to deal with such cases—(*a*) when the organs at either side are sufficiently free from disease to justify attempts at conservative operations; (*b*) when the partially affected adnexa on one side are associated with organs so seriously affected on the other as to call for the removal of the latter.

We will deal with the first contingency. I take it that no one will remove adnexa in whole or part in which such operations as ovarian resection or salpingostomy offer a reasonable hope that a cure will follow their performance. This would apply to simple cystic states, small blood cysts, localised suppurative foci in the ovary, or localised and circumscribed distension and stricture of the Fallopian tube.

Here careful ablation of the diseased parts, and plastic operations, afford the woman all the protection she can expect against a second operation. Should she, however, insist that in the event of its being found that there is a reasonable doubt of such a favourable result following, the adnexa are to be removed, then I think she is entitled to the benefit of that doubt, and should not be subjected to the risk and ordeal of a second operation.

Before I discuss the other class of case, I may here interpolate a few comments on the way in which we are apt to assume to ourselves the privilege of determining, not what women may or do feel in these matters, but what we consider that they ought to feel. I fear that our familiarity with the complaints of women, of pain, misery, domestic incapacity, confinement, and loss of all social pleasure, breeds in us a certain degree of contempt, and that we should view them from a very different standpoint if we ourselves were the victims. We are so accustomed to the marvellous endurance and self-denial, and the power of bearing silently, that women as a rule possess in so much a greater degree than men, that we are apt to grow somewhat callous in making further, and perhaps unreasonable, demands on their fortitude. Possibly the common misuse of such terms as "neuroses" and "hysteria" has something to say to this. How many men would escape the stigma of being classified as "neurotic," or "neurasthenic"—nay, even "hysterical"—cool, brave, and imperturbable though they may be under ordinary circumstances, if they had some abdominal disease for months or years, comparable to any of the diseased conditions from which women often suffer uncomplainingly? How many men would screw up courage to undergo the ordeal of a second, or possibly third cœliotomy? As compared with the majority of operations called for in diseases of the genitalia in women, removal of the appendix is a mere trifle. Also the antecedent effects on the vitality of the sufferer are widely different. Ask any man how he would like to go through the trial of a second similar operation! Look at it how we may, to subject a woman to a second cœliotomy, the apprehension of it accentuated by her experience of the previous one, the unavoidable pain and risk, is a thing to be avoided on all grounds whenever it is possible, and it is our duty to take every precaution to protect her from such a catastrophe. Doubtless there are women who have a craving for operation, a distinct outcome of morbid mentalisation. We have all met examples of such. These are true instances of complex neuroses, in which the genitalia play an important part, but no surgeon will minister to a mind so affected by humouring the morbid whim or impulse by operating.

There is another inquiry that some women make, and one that seriously influences their determination. That is, how far the disease in the genitalia is likely to influence the germs which follow future conceptions? This is a question of great interest. It touches on the problem of hereditary influences, both paternal and maternal, in the pro-nucleus in the ovum. One would like to follow out the life histories of such conceptions, and study the pathological developments in the mature organs, and the correlative mental attributes, latest modifications consequent upon such embryonic influences not necessarily manifesting their presence until adolescence or during adult life. If it is not unreasonable to infer that the ovum must be influenced by the physical and mental state of the woman, whose genitalia have been seriously affected, and by the local morbid conditions, whatever they may be, which may tend to a predisposition to kindred changes in the offspring. For instance, a patient from whom the tuberculous-pyo-salpinx I show was removed eighteen months since, is now in the third month of pregnancy.

The other class of case to which I refer is that where it is imperative to remove the adnexa of one side, and where at the time of operation those of the other are found to be partially affected in any of the ways that I have mentioned.

Is it the best course to perform some conservative operation and return the adnexa, or to ablate them? Here I show the adnexa removed from two patients. The first was operated upon by me on December 9th, 1900, for adnexal disease, and the affected tube and ovary were removed.

The patient was a married woman, æt. 26. The adnexa were shown by me here. Constant and uncontrollable vomiting necessitated operation. All vomiting ceased from the time of its performance, and the patient was apparently restored to perfect health. The cyst on removal was the size of a small orange, there had been intra-cystic hæmorrhage into the tumour. At the same time the opposite ovary was resected, and a fair sized cyst was ablated, while some smaller cysts were punctured. In May, 1902, she contracted influenza, and after this similar attacks of vomiting to those she had suffered from in 1900 commenced. There was also severe headache, and a great pain in her right side. I saw her in July, the sickness having increased, and also the pain. She now had great difficulty in walking, and there was incontinence of urine. On September 15th I performed a second operation, when these adnexa were removed. It will be seen that there was cystic degeneration of the ovary, the tube being distended, and there was a double cyst in the broad ligament. She made a rapid recovery.

No. 2 is from a patient, æt. 32, who was operated upon by another surgeon, an able gynæcologist, five years previously for a hydro-salpinx at the left side; it was the size of a fist, and was removed by a posterior colpotomy. The operation was a simple one. At the time both ovaries appeared on inspection to be healthy, except for the appearance of several small cysts, which were punctured. Both ovaries were returned. The uterus was healthy in size and position. The condition, as reported to me when I saw her in August last was as follows:—Uterus normal, right ovary normal, left enlarged and painful. There was a serious falling off in weight and general health. On examination, I found an adnexal tumour filling the pouch of Douglas. Operation revealed a left ovary and tube fixed and surrounded by adhesions. At the right side there was a cyst about the size of an orange, and an enlarged tube —a hydro-salpinx. The right adnexa were removed and the patient is now quite a different woman, notwithstanding the added complication of a movable and enlarged kidney. The left ovary still discharges its function, though I fear that it will ever be the source of at least periodical trouble.

Here are two operations occurring within a few months, in which a complete operation on both adnexa in the first instance would have saved a second one, also great suffering, if not risk. I have at present under my care three cases in which oophorectomy at one side, resection at the other, and ventro-suspension, were performed by me, and in both there is now an adnexal mass, which I fear will require removal.

The fact remains that no surgeon can tell what percentage of such conservative steps may bequeath a demand for secondary interference. And the very nature of the affections to which these organs are subject (I speak more particularly of the ovaries) renders this recurrence a probability. Nothing is more tempting than to do a neat resection and return an ovary. Nothing is more gratifying than to find pregnancy follow our efforts, and maternity secured. Let me pass round a few substantial evidences (photographs of children) of resection, following ventro-fixation and salpingo-oophorectomy. For one of these cases I am indebted to a gentleman who is here to-night, and who can bear testimony to the patient's miserable state of health at the time of operation (Dr. W. K. Bourke). I only refer to the gratifying result of her complete recovery in order to show that I am fully alive to the other side of the question, namely, the desire to preserve the adnexa at all hazards. There are points not to be overlooked in considering this question. Kindly remember that nothing is further from my desire than to even seem to dogmatise on so important and disputable a point as the one we are here to discuss calmly and without bias. Still, I must candidly say what my own view is. I shall summarise it thus—given a case of adnexal disease demanding abdominal cœliotomy, in which the adnexa of one side are seriously involved, the contingency of partially affected or unhealthy adnexa at the other side should be carefully discussed with the patient, and her deliberately-considered wishes ascertained as to the removal of or retention of these. The possibility of the need for a second cœliotomy should be pointed out to her—the surgeon not merely obtaining what is known as "a free hand," but eliciting her express wish after the clearest possible explanation placed before her of the advantages and disadvantages of both courses. If there is a reasonable doubt of the future health of the adnexa in question, then I think the best course is to remove them, provided always that the patient has given her full consent to such a proceeding should it be deemed necessary.

I have said nothing of certain questions which are closely allied to this one. These are not touched on in this short paper, but concern the relative advantages of the vaginal and abdominal routes in affections of the adnexa-drainage as against radical operation in certain cases of pelvic suppuration (recently again advocated by Noble) or any collateral issues as the consequences of double salpingo-oophorectomy, sexual or other, and I have avoided any allusion to methods of technique in conservative operations on the adnexa. None of these matters, therefore, come under discussion to-night. I trust that you will agree with me in thinking that the subject is one that justifies me in bringing it before you.

ABSTRACT OF NOTES
OF
EIGHT CASES OF GASTROTOMY FOR GASTRIC ULCER, *(a)*

By MANSELL MOULLIN, B.A.OXON., M.A., M.B.

IN six of these cases the operation had been performed for hæmatemesis, and in two for continued pain and vomiting. One patient, who had lost so much blood that she had to be transfused both at the time of operation and subsequently the same evening, died on the eighth day from general peritonitis, due to the contents of the stomach having escaped through the anterior wound, which showed absolutely no sign of repair. The five others recovered. In addition to these, Mr. Mansell Moullin stated that he had been consulted with a view to operation in eleven other cases. In five of these no operation had been performed, and they had all died, three from hæmorrhage, one from perforation, and one from exhaustion. The six others had been operated upon with one death The notes of these had been already published, (*Lancet*, October 20th, 1900, and July 5th, 1902.) Putting aside, therefore, all operations for the complications and sequelæ of gastric ulcer, such as perforation, pyloric and cardiac stenosis, having less contraction, perigastric abscess, adhesions and such like, of the nineteen cases of gastric ulcer in which he had been consulted, the five which were not operated upon died, and only two of the fourteen which were. In eleven of these fourteen the immediate cause of the operation was hæmatemesis, and six of these were so far gone from loss of blood that transfusion had to be performed upon the table or immediately after. Of the two that died, in one the kidneys were badly diseased, and there was an open artery on the floor of the ulcer; in the other, as already mentioned, the loss of blood had been so great that the patient had not sufficient recuperative power left to effect repair of the wound. Everything had gone on well until the fourth day, when the wound in the stomach opened, and general peritonitis followed. In most of these cases the ulcer had been excised, and the wound brought together with fine silk sutures. In two, however, it was simply sutured. In two others, both of which recovered, the whole thickness of the wall of the stomach at the site of the ulcer was strangulated by a silk ligature applied round it from the mucous surface, one or two Lembert sutures being applied in addition on the outer surface; and in one in which the ligature applied in this way could not be made to hold, owing to the softened state of the mucous membrane and the great thickening of the other layers, the wall of the stomach was raised into a fold, which was sutured through and through transversely from the mucous surface, the ends of the contiguous ligatures being tied together, so as practically to effect the same result as ligature of the wall *en masse*. Mr. Mansell Moullin went on to say that he had not the slightest intention of advocating operation in all cases of gastric ulcer, or of anything that would be construed into such advocacy; but that he was certain that if operations were performed more freely, not only would many more lives be saved, but that patients would be saved an enormous amount of suffering. At his request Dr. Bulstrode had collected and analysed the cases of gastric ulcer admitted into the London Hospital from 1897 down to the present time with the view of ascertaining the results of hospital practice. The number was exactly 500, 98 men and 402 women Of these no less than forty eight, or nearly 10 per cent., had died from perforation and peritonitis; thirteen (2½ per cent.) from hæmatemesis, and twenty-eight (5·5 per cent.) from other causes. The total number of deaths was eighty-nine, or, approximately, 18 per cent. These figures, however, were deceptive in that they embraced all the slighter cases on which no one ever proposed to operate. If these were left out, and only the gravest of the grave counted (such cases, for instance, as those in which operation might be contemplated), the percentage would be far higher. Dr. Bulstrode had also calculated that of these 500 cases upwards of 216, or 42 per cent., had been in hospital already for this complaint, and had relapsed. If to the 18 per cent. that die, and the 42 per cent. that relapse are added all those cases in which the later sequelae (such as pyloric stenosis, &c.) occur and those in which cancer develops (estimated by Hauser at 6 per cent.), it must be admitted that the results of the present method of treatment are not so successful as they are usually thought to be, and not nearly so successful as they would be if an operation were performed in the more serious cases, those which would terminate fatally. The indications for operation in acute cases are threatened perforation and hæmorrhage. The former may present no symptoms of any kind until perforation actually takes place The greater part of the wall of the stomach is absolutely devoid of sensibility and may be cut, or pinched, or burnt, without the patient being aware of it. It is only the parietal peritoneum that has sensory nerves, and an ulcer of the stomach does not cause pain until the irritation, spreading from it, affects the parietal peritoneum, under that which lines the under surface of the diaphragm. Pain or pressure, therefore, is not so much an indication of ulcer of the stomach, as that the ulceration is spreading, and is, therefore, likely to end in perforation. One attack of hæmorrhage is not an indication for operation, but a second attack is. Hæmorrhage in ulcer of the stomach, when it is severe, is nearly always caused by a lateral opening in the wall of an artery. Severe capillary hæmorrhage needs proof. If the wall of an artery has given way, the opening may become plugged, and the hæmorrhage never return. But, if it does return, it means that the plug has been dislodged, or destroyed, and it is not wise to expose the patient to the risk of a third attack. In chronic ulcer it is entirely different. The fact of an ulcer having become chronic is proof that the previous treatment has failed. Chronic ulcer is exceedingly serious, not only in itself, but from the complications it entails, and if treatment has been tried thoroughly once, and has failed, there should be no further delay in operating. The mortality from hæmatemesis alone in chronic ulcer of the stomach has been shown by Dr. Wall, from statistics collected at the London Hospital, to be 6 per cent. in women and 12½ per cent. in men. If to this is added the mortality from perforation, exhaustion, the supervention of cancer, perigastric abscess, and the recurring other sequelæ which so frequently set in, it must be admitted that the death-rate is a very serious matter. Mr. Mansell Moullin also drew attention to a kind of case which had hitherto been classed with cases of chronic gastric ulcer, but which should be kept separate, and which he proposed to speak of as recurrent ulcer. The patients in the intervals between the attacks were perfectly well. There was either some condition of the stomach itself, or of the general constitution, which predisposed to the successive development of ulcer of the stomach. What this condition might be was not known; but, until it was known and could be remedied, it was better that gastro-enterostomy should be performed and recurrence prevented by placing the stomach at perfect rest, than that the patients should be left with the risk of hæmatemesis, or of perforation, constantly before them. Instances were quoted in which acute ulcers, which could not have been present more than a week or two at the most, were found, although the symptoms had lasted off and on, with intervals of perfect freedom for several years.

(a) Read before the Clinical Society of London, November 14th, 1902.

Clinical Records.

OPERATION FOR PERFORATED GASTRIC ULCER —THREE CONSECUTIVE CASES. (a)

By **Robert Bickersteth** F.R.C.S.

Senior Assistant Surgeon, Liverpool Royal Infirmary.

The first patient was a housemaid, æt. 27, on whom the operation was not performed until twenty-seven hours after the perforation had occurred. The ulcer was on the anterior surface of the stomach, but close to the cardiac orifice To get at it at all, it was necessary to completely divide the left rectus muscle, and even then it could only be reached with the greatest difficulty.

The second patient was a man, æt. 23, in whom only four hours elapsed between perforation and operation. The ulcer was on the anterior surface of the stomach, but close to the pylorus. There was no great degree of thickening of the stomach wall round it, and it could be readily closed by a double row of sutures, invaginating a fold of stomach wall at this part.

The third case was a hospital nurse, æt. 30, in whom the operation took place four hours after perforation. Much turbid fluid was found in the abdomen, as was also the case in both the operations previously described —but even after a most careful and prolonged search no sign of ulceration or perforation could be discovered—not only in the stomach, but in part of the small or large gut. A second incision made over the appendix showed both this and the Fallopian tubes to be healthy, and after a thorough washing out, and provision for free drainage from both abdominal incisions, this case had to be sent back to the ward without the perforation ever being discovered and dealt with.

(a) Notes read at Meeting of Liverpool Medical Institution November 6th, 1902.

Contrary to expectation, the woman, after lying in a critical condition for several days, eventually did well, and made an excellent recovery; she was now, two years later, in good health, and busily engaged in her calling.

Of the other two cases, one occurred fifteen months and the other three months ago, and all three cases not only regained their health very rapidly after the operation, but showed a most marked improvement on their previous condition, and put on flesh.

This Mr. Bickersteth attributed to the very careful and rigorous dieting enjoined for many weeks after the operation; the patients, after they had passed through so grave a crisis, readily submitting to measures which, under any other circumstances, they would scarcely have been induced to tolerate.

Transactions of Societies.

CLINICAL SOCIETY OF LONDON.

Meeting of Friday, November 14th, 1902.

Mr. Howard Marsh, F.R.C.S., President, in the Chair.

Dr. W. H. B. Brook on cases illustrating the

CLINICAL FEATURES OF AN EPIDEMIC OCCURRING AT LINCOLN IN MAY, 1902.

In the early part of May, 1902, an epidemic suddenly broke out in the city of Lincoln, of which the chief characteristics were :—Sore throat with œdema of the fauces and uvula, the tonsils in many cases being covered with a drab-coloured fur. A dark measly eruption was met with in two-thirds of the cases on the second day, lasting from a few hours to one week, and showing a tendency to recur in some cases as late as the sixth week. In some cases it was of an urticarial character. During the fading of the eruption desquamation occurred in one-third of the cases. The fever was never high unless complications were present, generally under 102°, falling on the appearance of the eruption. The pulse-rate was not increased in proportion to the fever. Albumin was never present in the urine, except in two instances in which at the end of a month there was a transient attack of hæmaturia. Seventy-five cases occurred in the space of seven days in the practice of Dr. Brook and that of his partners, Mr. Charles Brook and Dr. Stanley Green, and in no case did the infection appear to be communicated to others. Nearly all the patients were adults, several were well advanced in years. The complication most commonly met with was swelling and tenderness of the cervical glands, generally about the fourth day; this was accompanied by a return of the fever, which in some cases became very high, and could only be reduced by the administration of anti-streptococcus serum. This inflammation of the cervical glands occurred in some patients who had apparently quite recovered, and in them appeared to be dependent upon a too early return to the meat diet, which also had a tendency to cause gastritis and even peritonitis. Stiffness of the muscles and joints was met with in several instances; in one, an adult, this occurred at the end of a fortnight, and was so marked as to resemble acute rheumatism, the stiffness of the joints persisting for several months. Septic phlebitis occurred in one case, æt. 66, which terminated fatally on the twentieth day, with symptoms of pyæmia, death being ushered in with hemiplegia, coma and convulsions. With one doubtful exception all these patients had had milk from the same dairy, a circumstance which was suggestive of the infection having been conveyed by milk The epidemic was investigated by Dr. Klein, who isolated a special micro-organism from swabs taken from the throats of several of the patients. The treatment that gave the best results was rest in bed with a milk diet. Calomel followed by a saline purge when first the patient was seen, and a simple saline mixture with salicylate of sodium followed during convalescence by the administration of quinine. Great relief was afforded by the application of nitrate of silver to the fauces, and the frequent use of a gargle containing carbolic acid and borax.

Dr. Goodall observed that similar epidemics were not unknown elsewhere, and he referred to an instance in N.E. London in which the infection was thought to have been conveyed in the milk. He pointed out, however, that scarlet fever patients who had bad throats of the anginoid type often developed very curious eruptions.

Dr. E. G. L. Goffe asked if Koplik's spots had been looked for, also whether the usual complications of scarlet fever were absent in all the cases?

Dr. Savill referred to an epidemic which broke out in the Metropolitan Infirmaries in 1891, especially at Marylebone and Paddington. The symptoms were very similar to those described by the author but severer. The eruption became general, and there was a slight tendency to pyrexia. The chief difference lay in the absence in these cases of any throat lesions, at any rate in the milder cases. He thought that possible food supplies might have received more attention when investigating the source of the disease, and it was a significant fact that on talking the matter over with Mr. Lunn, of the Marylebone Infirmary, they found that the only purveyor they had in common was the dairyman. His own belief was that the poison was conveyed in the milk. An epidemic of a somewhat similar kind had occurred at the Greenock Infirmary. Every autumn a tendency to skin diseases was noticed in the infirmaries of London, and he thought this fact required to be investigated.

Mr. John R. Lunn mentioned a most remarkable feature of the epidemic referred to by Dr. Savill, viz., that it lasted six years with one year's intermission. The disease was infectious or contagious, since his assistants and nurses caught it It was investigated by most authorities on skin disease in London. He had seen several outbreaks of a similar character, but they were not as severe. They thought at the time that it was due to the milk. It was remarkable that the disease mainly affected old people. They had not had any other outbreak since, but recently there had been two or three isolated cases, and he had been apprehensive lest they should usher in another epidemic. No treatment seemed to have any effect on the malady, except, perhaps, the application of collodion and iodine.

Dr. Poynton asked whether antistreptococcic serum had been used?

Dr. Brook, in reply, said they had found that boiling the milk prevented persons taking the complaint. The poison seemed to reside in the cream more than in the milk. In only one case was there any otorrhœa, and in that case the erysipelas bacillus was present in the discharge. In one case the cervical glands suppurated. Koplik's spots were looked for in every case, but were never seen. He had injected antistreptococcic serum supplied by Parke, Davis and Co. with most remarkable effects, the temperature falling at once from 105° to 100° F., and this on several occasions They had seen cases of true scarlatina, and the difference was marked.

GASTROTOMY FOR GASTRIC ULCER.

Mr. Mansell Moullin read the notes of eight cases in which he had operated for gastric ulcer, which will be found on page 544.

Mr Barker raised the question as to what ought to be the line of treatment in cases of severe hæmorrhage from the stomach when they had decided to operate. Ought they to open the stomach and look for the point of hæmorrhage, or should they content themselves with relieving the gastric stasis by gastro-enterostomy. He admitted that he experienced great difficulty in deciding this point. There were many cases in which no ligature would hold in the gastric wall, and moreover, in many instances, even on looking for the orifice it could not be found. He recalled such a case in which he failed to detect it after careful search, and even on the post-mortem table they almost gave up the search before a minute aperture was detected.

Mr. **KELLOCK** said they must draw a sharp line between hæmorrhage from the stomach and perforation, the latter, of course, calling for immediate treatment. The author seemed to have operated for the relief of pain and vomiting, but these were not the most urgent symptoms. He thought that the vomiting was often not due so much to the condition inside the stomach as to something outside and around the ulcer. He himself had operated on two patients with these symptoms. One had suffered for seventeen years from pain and vomiting, and on opening the abdomen he found a large scar in the wall of the stomach, and attached to it a tough band of adhesions, which eventually he excised in its entirety. The result was in every respect satisfactory. More recently in another patient presenting much the same symptoms, very anæmic with pain and vomiting, but no wasting, the possibility of hysteria was entertained, but on opening the abdomen he found exactly the same condition of things, the same depressed scar in the wall of the stomach, and adhesions to the parietes, which he divided, simply turning in the wall of the stomach without opening it. This patient had been well ever since. He asked the author why he made another incision in the stomach in one of his cases instead of attacking the depressed scar from the outside.

Mr. **BIDWELL** asked whether adrenalin had been used, and mentioned the case of a patient who had severe hæmorrhage after gastro-enterostomy, which was relieved by this drug. In the milder cases he thought this drug should be given a trial.

Mr. **MANSELL MOULLIN** in reply, re-called a case in which gastro-enterostomy had been performed, and the hæmorrhage had continued, indeed, he did not see how it could be otherwise. In the case referred to by Mr. Kellock, he had closed the anterior incision in the stomach by two rows of sutures, but the patient was so debilitated that no attempt at healing had taken place. If the sutures in the posterior incision did not give way, that was probably because, comprising as they did much more tissue, sufficient time had not elapsed to allow of this taking place.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

PATHOLOGICAL SECTION.

MEETING HELD FRIDAY, NOVEMBER 7TH, 1902,
PROFESSOR **BENNETT** in the Chair.

PROF. E. H. **BENNETT** exhibited specimens of

DISLOCATION OF SHOULDER,

and read a note on some cases in which Kocher's method of reduction of dislocated shoulder has failed. The specimens were a dissection of an old unreduced dislocation, which in all particulars conformed with Malgaigne's definition of subclavicular dislocation; and a cast of the limb exhibiting the characteristic features of the injury. The cases recorded were two from the living; one seen on the day of the injury, the second, five weeks after. In the first an attempt at reduction had already failed, made by very competent hands. The second was five weeks unreduced, and had been five times submitted to attempts at reduction under anæsthesia. The injuries conformed in their features with the subclavicular dislocation of Malgaigne, in both Kocher's manipulation and the method by the heel in the axilla failed. The reduction was in both obtained by traction with rotation on the arm abducted downwards and outwards. Professor Bennett discussed the influence on the reduction of the character and position of the lacerations of the capsule.

Dr **KNOTT** said he would like to ask Professor Bennett to explain why he considered Kocher's method so much superior to horizontal and upper vertical extension?

Professor **BENNETT**, in reply, said the reason Kocher's method is so useful is that it applies particularly to the intra-coracoid dislocation, which is the most common, or its immediate modifications. He had never met with a case which resisted Kocher's method, except the two he had described.

Dr. **EARL** showed a case of

ADENOMA OF THE LIVER.

In describing the case, Dr. Earl said the liver showed the most marked synotic atrophy he had ever seen. His attention was drawn to a small, round mass, well marked off, and of a green colour. The liver contained a large number, fifteen or twenty, of these, and most probably there were more. The largest was about half an inch in diameter. The liver itself had altered in appearance and the histological characters of these masses were hard to make out, none of them abutted on the surface, and consequently his attention had not been drawn to them. The cells in them bore a close resemblance to liver cells. They were divided into lobules, and were surrounded by a fibrous capsule. The cells were arranged after the manner of normal liver cells, but with less regularity. He found coagulated bile present, and there was a great deal of granular bile-pigment in the liver. Sections of some of the smaller tumours showed more marked resemblance to normal liver structure. These tumours appeared to be one of the forms of adenoma. He presumed that synotic atrophy of the liver had nothing to do with these.

Dr. **DAWSON** asked Dr. Earl whether this liver showed signs of malignancy? He had seen in Vienna two cases of adeno-carcinoma of the liver which resembled these.

Professor **O'SULLIVAN** said he would like to ask Dr. Earl if there was any difference between the cells in the liver and normal liver cells? He had a case of extreme cirrhosis of the liver in a young girl, in which there were growths through the liver, when the cells were larger than normal and less regularly arranged. He looked upon this as regenerative.

Professor **WHITE** said the question of whether this was an adenoma of the liver or an adeno-carcinoma must be left to Dr. Earl. He was inclined to agree with Dr. Earl that it was adenoma from its microscopic characters, and also as he felt sure that Dr. Earl would not have given it the name of adenoma if secondary growths were found. He said Dr. Scott had shown some time ago a case of a large single adenoma of liver.

Dr **EARL**, in reply, said that with regard to what Dr. Dawson had said he felt certain that they were not malignant tumours There were no growths found anywhere in the liver, and the fact that the resemblance to normal liver cells was so close, would negative the view that the tumours were malignant With regard to Dr. O Sullivan he said he did not see any great difference between these cells and normal liver cells. As to whether there was an attempt at regeneration, that could not be decided.

CAVERNOMA OF THE LIVER.

Dr. **EARL** said that this was a well-recognised and not uncommon condition which occurs in human beings and in the lower animals. Cavernomas were sometimes single, but generally, as in this case, multiple, and usually occurred in elderly people, though sometimes they were seen at a very early age, even in infants of a few weeks old. They appeared of a dark purple colour on account of the contained blood, and were of various sizes. They might be as large as an apple. They were not raised above the surface of the organ when they abutted on it, and they were also found in its substance. Their structure resembles that of the cavernous tissue of the penis. Simple muscular tissue is said to occur in their walls. In some cases liver cells have been found in their walls. The larger tumours are surrounded by a fibrous capsule; the smaller merge in the liver substance without any capsule. Though the condition is well recognised, there is considerable doubt as to their pathogenesis. They have been considered tumours, but they never cause any enlargement of the liver. They are merely substitutions of the liver tissue, and are generally believed to be due to dilatation of lobular cavities with subsequent pressure atrophy. Tumours very similar to these have been produced in cats by causing narrowing of the hepatic vein. The fact that liver cells are found in the walls is in favour of their origin from pre-existing capillaries in these places.

Professor Scott exhibited

AN EPITHELIAL TUMOUR OF THE GALL-BLADDER

removed by operation by Mr. Heuston. There was a large mass attached to the gall-bladder, which was swollen. There were calculi in it and in the surrounding tissues. A section showed it to be of undoubted epithelial origin. Most of the cells were undergoing a mucoid degeneration.

Mr. Arthur Benson and Dr. Earl showed a case of

CONGLOBATE TUBERCULOUS TUMOUR OF THE CHOROID

in a girl, æt. 14. The growth, which only dated from March 27th, 1902, occupied almost the whole interior of the globe, the vitreous being pushed to one side and the lens remaining transparent throughout. This variety of tuberculosis of the choroid was stated to be a very rare affection, whilst the miliary variety was comparatively common. In this case another remarkable circumstance was noted, viz., that there was no tuberculous family history, nor was there any other focus of tuberculous disease to be found in any other part of the patient. The sections, which were made by Dr. Earl, showed that caseation had taken place in the tumour, and giant cells were also visible. The growth was adherent to the sclerotic in one place, and the retina was wholly detached. The other eye was normal, and the child, though naturally frail, seemed to be in excellent health.

Dr. Earl said that on cutting into the eye he found the vitreous chamber almost completely obliterated by a whitish mass, and he could see a couple of opaque spots even with the naked eye. On examining this mass he found it was strongly adherent to the sclerotic at one point, and at no other. It was a tuberculous mass with a small quantity of caseation. The ciliary processes and the iris were quite free. The layers of the retina were to be seen.

Mr. Story said the case reminded him of a specimen which he had exhibited some two years ago. It was one of a solitary tuberculous tumour in a young woman, æt. 18 or 20. It was in the optic papilla, and simulated the choked disc of intracranial disease. The growth in this case was retinal rather than choroidal.

The meeting then adjourned.

LIVERPOOL MEDICAL INSTITUTION.

MEETING HELD THURSDAY, NOVEMBER 6TH, 1902.

The President, Rushton Parker, Esq., F.R.C.S., in the Chair.

Dr. Grossmann showed a case of

CONGENITAL ABSENCE OF THE IRIS

in both eyes, the only one of the kind he had ever seen. The patient was a young man, æt. 26. The formation of the head was normal. The corneæ were normal, and the anterior chamber of normal depth. The iris completely absent in both eyes The lenses slightly greyish, in both an anterior polar cataract, and a smaller posterior one. There was no trace of ciliary processes visible, not even after eserine. No change in zonula. No photophobia. Vision in both eyes = $\frac{1}{6}$ with + 7 sph. and + 2 cyl. vert. Dr. Grossmann said he intended to examine the lenses for the purpose of seeing whether any support could be found either for Helmholtz's or Tscherning's theory of accommodation.

Messrs. Richard Williams and Stevenson spoke, and Dr. Grossmann replied.

Dr. Burton reported a successful case of

CÆSAREAN SECTION IN A RHACHITIC DWARF.

He said that if the operation was to be a success it must be undertaken as an operation of election, and not as a last resource. Every medical man at the present day ought to recognise at his first examination of a woman whether a living child can pass through the pelvis or not If any doubt existed, attempts to deliver through the pelvis were unjustifiable, as thereby a later necessary operation might be seriously handicapped. In this particular case no doubt existed, the conjugate measuring not more than an inch and a-half. Dr. Burton especially noted the use of an intra-uterine gauze drain, and suggested as a further advantage its action as a uterine stimulant. Finally, Dr. Burton said he had attempted to procure utero-parietal adhesions after Dr. Wallace's method.

Dr. O'Hagan, as a general practitioner, agreed as to the possibility of deciding on a first examination in cases of marked contraction of the pelvis. He pointed out, however, that the greatest difficulty arose in cases in which the conjugate, although it approached the normal, was still relatively to the size of the fœtal head too small. Personally, he preferred the practice of the induction of premature labour at seven to eight months.

Drs. Gemmell, Stokes, and E. T. Davies spoke, and Dr. Burton replied.

Dr. Lloyd Roberts related a case of

GLIOMA OF THE CEREBELLUM WITH INTERMISSION OF SYMPTOMS.

A woman, æt. 29, had double optic neuritis, headache, and vomiting, patellar reflexes absent. The symptoms of intracranial pressure increased, clonic spasm of limbs, inequality of pupils, paralysis of the left sixth nerve. She emaciated rapidly and became comatose. After two months in this state, she began to improve and ultimately became perfectly well except for blindness from optic atrophy, and absence of knee jerks. The patient remained well for eight months, when a return of the symptoms proved fatal, iodide of potassium this time proving of no avail. P.M. A glioma was found occupying the whole of the middle lobe of the cerebellum.

Dr. Gullan said he had seen an almost parallel case, also a cerebellar tumour. In this, however, no return of the symptoms had occurred, but blindness, due to optic atrophy, persisted.

Drs. Warrington and Macalister also spoke, and Dr. Lloyd Roberts replied.

Mr. R. C. Dun showed

TWO UNUSUAL CASES OF SPINA BIFIDA.

The first patient, a girl, æt. 6, had a lumbo-sacral spina bifida from birth. She was run over by a milk-cart, and the spina bifida disappeared entirely without any external escape of fluid. Fourteen days later a swelling appeared over the left dorsum ilii; a few days later the old spina bifida reappeared. From the time of the injury there was marked pain in the back, with partial bladder paralysis. On operation, the old sac was found to be abnormally thick; a small opening at its left side led into a very thin sac closely adherent to the overlying tissues. The adherent nerves were returned to the spinal canal and the sac excised. Result: Cure of the spina bifida, complete loss of pain, bladder paresis unchanged. The second case, a girl, æt. 7, had a lumbar spina bifida occulta, overlying which was a hair-field 6 ins. by 3¼ ins. with hair 7 ins. long.

The President commented upon the curious result of the accident, and said he had a very similar case to Mr. Duns' second patient under his own care.

Mr Robert Bickersteth read a note on operation for perforated gastric ulcer, based upon three recent cases, which will be found under "Clinical Records."

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD THURSDAY, OCTOBER 23RD, 1902.

Dr. John Robertson, President, in the Chair.

Dr. Arthur Hall showed (1) (for Mr. H A. Mason) a case of congenital jaundice in a girl, æt. 13. The child was noticed to be jaundiced at birth and has remained so ever since. Except that she was backward in development and especially in walking, she has always had good health, and is now bright, active, and intelligent, though perhaps a little young for her years. The conjunctivæ are deeply jaundiced, the urine contains a trace of bile pigment and the fæces are fairly well coloured.

(2.) A case of secondary syphilis with severe headache and periosteal nodes on the forehead. The date of primary infection could not be obtained, but the patient gives a history of five weeks' headache. There is roseola. adenitis, cachexia, pharyngitis and laryngitis.

(3.) Case of urticaria with well-marked dermographia.

(4.) Case of disseminated lupus with lichen scrofulosorum and patches of verrucous lupus.

(5.) An old man with extensive rodent ulcer of thirty years' duration, in whom the right orbit and root of the nose is completely destroyed.

(6.) A severe case of seborrhœic dermatitis.

Mr. **Snell** related particulars of (1) a case of complete avulsion of the eyeball by midwifery forceps; (2) a case of palsy of the upper movements of the eyeballs. Recovery. He also introduced (1) a case of acromegaly with bi-nasal hemianopsia; (2) two cases of unilateral congenital hypertrophy of eyelids and face; (3) two cases of monocular blindness following fracture of the skull; (4) two cases of symblepharon, treated by Thiersch grafts. Stereoscopic photographs of cases were shown.

Dr. **Godfrey Carter** showed a case of bilateral clonic spasm of facial muscles. The patient was an engraver, æt. 68. Two years ago clonic spasm of orbicularis muscles followed slight eczema of eyelids and has gradually got worse since. When at close work the spasm ceases, but it is often so severe when out of doors that the eyes are completely closed, and crossing a street is dangerous.

Dr. W. T. **Cocking** showed a case of well-marked jaundice in a woman, æt. 50, which appeared at the age of three weeks and has persisted until the present time.

Dr. **Hall** also read a paper on "Some Cases of Blue Discolouration of the Toes (so-called Cyanidrosis)," in which the staining was due to a blue aniline dye used in the manufacture of cheap black stockings. This is dissolved out by the acid sweat of the feet, and stains the upper layers of the stratum comeum to some depths.

France.

[From our own Correspondent.]

Paris, Nov. 6th, 1902.

Gastric Ulcer.

The treatment of hepatic colic by olive oil internally is of ancient date, but Prof. Mathieu, of Paris, by a series of experiments, has come tot he conclusion that the same treatment is highly beneficial in cases of stenosis of the pylorus, and in chronic gastric ulcer, where an excess of acid existed.

The olive oil possesses a considerable nutritive value, and besides does not provoke gastric fermentation, as is observed with the lactic regimen.

The amount of the oil ingested daily was about 5 ounces, given in three doses. The patients seemed to take it without much reluctance, and after about a week of the treatment the painful gastric symptoms had disappeared.

Obesity.

To persons suffering from obesity with accummulation of fat in the lumbar and abdominal regions M. Kisch, besides the usual diet treatment, recommends local friction with the following ointment:—

Iodide of potassium, ʒj;
Iodine, grs vi:
Vaseline, ℥j.

To be rubbed in night and morning over the lumbar region, and the parts covered with a large compres steeped in a solution of acetate of aluminium:—

Acetate of lead, ʒij;
Alum, ʒss;
Water, ℥viij:

and a sheet of oil silk or other impermeable tissue outside the compress.

For friction of the abdominal walls M. Kirsch replaces the ointment by

Vinegar of squills, ℥viij;
Iodide of potassium, ʒij.

The Population in France for 1901.

According to official reports, the births for 1901 exceeded the deaths by 72,000, while the preceding year the mortality was greater by 26,000. The above result is mainly due to an increase in the number of births and an important decrease in the mortality.

Examining the figures in another order of ideas, it is found that proportional increase represented 0·19 per cent. of the population, whereas for the previous decade it had not exceeded 0·06 per cent. However, the situation of the country as regards the increase of its native population remains always unsatisfactory in spite of the increase registered for 1901, as it only represents 0·07 per 100 inhabitants.

Germany.

[From our own Correspondent.]

Berlin, November 15th, 1902.

The *Deut. Med. Zeit.*, No. 89, has a reference to an article on

The Operative Treatment of Graves' Disease,

by Dr. L. A. Diwawin. From his study of the literature, and from the observation of a number of cases of his own, the author arrives at a series of conclusions, of which the following are the essential ones:—In serious cases in which medicine and electrical treatment have alike failed, operation may afford relief or even effect a cure of the disease.

Medical treatment usually affords only temporary relief, and does not prevent recurrence, but operation secures permanent improvement, in which there are no relapses. The operation cannot, however, be regarded as one free from danger. For its performance general anæsthesia must not be made use of. After operation the treatment must be as careful as possible. Fresh air, good simple feeding, and perfect rest are indispensable.

Those operations are the most suitable that lead to a diminution in the volume of the diseased thyroid gland. There is no routine method of operating and there can be none, as the clinical features of the disease and its pathological substratum are not simple but manifold.

In the surgical section or the Naturforscher Congress Hr. Kehn made some retrospective observations on

Seven Hundred and Twenty Laparotomies for Gall-stone,

with special reference to hepatic drainage. He admits that in many cases of cholelithiasis a permanent resting stage may be brought about by rest cures alkalies, &c. A course of treatment at Carlsbad or Neuwahr will often effect so much that operation is not called for. He doubts, however, whether the actual recovery takes place, *i.e.*, whether the stones are really expelled. It should not be the aim to expel them but to keep them quiet in the gall-bladder and to prevent inflammatory attacks. The long-continued use of hot applications, along with rest in bed and Carlsbad water, does best service in this direction. In case of recurrent attacks of colic without icterus operation is justifiable. Hydrops and empyema of the gall-bladder were surgical affections. Gall stone cases that have become addicted to morphia should be operated on.

Patients with chronic icterus that is not dependent on stone and incurable disease of the liver should be operated on within at least three months after the onset of the jaundice, as, instead of the suspected carcinoma of the head of the pancreas, a curable chronic interstitial pancreatitis will often be met with. But even when no local swelling of the gall-bladder or liver can be found, in case of painful symptoms that resist treatment, operation should be resorted to. In such cases, especially in men, adhesions of traumatic origin are frequently met with without calculi.

It was not possible to formulate general indications for operation. Each case must be decided by itself. Men, especially fat ones, bear operations badly. Women who have borne children bear operations well. The poor must be operated on sooner than the rich, as they cannot afford the benefits of a Carlsbad course, and live carefully. In cases of diabetes, arterio-sclerosis, chronic nephritis, diseases of the heart and lungs, operation should be avoided as much as possible.

Hr. Körte, Berlin, gave an account of 135 cases of the kind operated on by himself.

Hr. Landerer spoke on

THE OPERATIVE TREATMENT OF PULMONARY TUBERCULOSIS.

Like Spengler and others, he had endeavoured to improve cases of cavities and abscesses of the lungs by resection of the thorax He had operated in six such cases with partial or very good results. As regarded the operation, the region of the heart and great vessels was to be avoided, as here pulsatory cicatrices always resulted. Tuberculous tissues should be touched as little as possible for fear of miliary tuberculosis. Stationary cases would give better results than acute ones. Cases of tuberculosis of the lower lobes, the worst for internal treatment, were specially suitable for operation. The difficulty of healing of almost all tuberculous affections, whether of the lungs or joints, lay in the impossibility, or at any rate the extreme difficulty, of obtaining cicatricial contraction. This was seen in coxitis, that healed at last suddenly but with deformity when separation of an epiphysis or spontaneous luxation took place.

Hr. Hofmeister related a case of non-tuberculous cavity of the lower lobe that confirmed what Mr. Landerer had just stated; by resection of ribs cicatricial contraction was rendered possible.

ASPIRIN

is described as an excellent analgesic by Dr. Armin Suess (*Med. Blatt.*, 40/02), and is not only a specific in rheumatic conditions, but is effective in nearly all painful conditions, even those due to new growths. The taste is not disagreeable. No disturbances, such as noises in the head or gastric troubles, have been noted as caused by it.

Austria.

[FROM OUR OWN CORRESPONDENT.]

VIENNA, November 15th, 1902.

THE bloodless reduction of congenital dislocation introduced by Professor Lorenz is well known to orthopædic surgeons, but it may be well to briefly describe it. The first step in the operation consists in the reduction, the head of the dislocated thigh being brought to the level of the acetabulum. The patient is anæsthetised to an extreme degree of muscular relaxation. A band is passed round the perineum and another around the ankle, the latter being attached to a screw-extension apparatus. The extension is evenly exerted, the operator meanwhile grasping the muscles of the thigh, manipulating them while extension is going on. When the head of the femur is brought below Nélaton's line extension is suspended, and is followed by the second step in the operation—the wedging of the reduced head of the thigh-bone into the acetabulum. This is the repetition. The chief anatomical barrier is the anterior part of the fibrous capsule which hugs closely the surface of the acetabulum. Although the head is in the proper position to enter the acetabulum, no amoun of force will drive it in. The operator, standing on a stool, seizes the thigh, flexed at right angles to the trunk, with one hand, and with the other grasping the head of the femur, he, by a system of extension, combined with rotation and gradually increased abduction, opens the way into the potential acetabular pocket. If the reposition is successful, the head of the femur is felt to leap over the posterior edge of the acetabulum, and the surgeon feels at once that reposition has taken place. The third and final step in the operation has for its object the formation of a solid acetabulum. By manipulation the soft parts of the acetabular cavity may be moulded, but the essential changes occur after the patient is allowed to get about. In order to retain the head of the bone in contact with the acetabulum, and thus re-awaken the process of growth so long dormant, the thigh is flexed in abduction at an angle of about 90°. The position is maintained by the aid of a plaster-of-Paris bandage carefully applied about the pelvis, and extending to the knee-joint of the affected side. After a few days the child is urged to walk. Every step tends to drive the head of the bone deeper and deeper into the acetabulum. Growth is re-awakened, the parts are again rendered active, and a neo arthrosis is gradually built up. Formerly Lorenz removed the first fixation apparatus at the end of three months, and usually subjected the patient to a second fixation period of three months. He now advocates rather longer fixation periods.

INFANT MALFORMATION.

Halasz, at the "Gesellschaft der Aerzte," showed a five days' old child with hare-lip, cleft palate, shortening of the right forearm, subluxation of the elbow joint, and absence of the ring and little fingers of the right hand. The other seven children of the family presented no departure from the normal.

PEMPHIGUS NEONATORUM.

Weiss brought forward a sixteen days' old child with pemphigus neonatorum in the early stage of recovery, presenting all the appearances of a transitional form of dermatitis exfoliativa, the desquamation extending far beyond the limits of the vesicle.

Knöpfelmacher related the history of two cases which had come under his own observation where pemphigus neonatorum, dermatitis exfoliativa, and impetigo contagiosa were associated. One of the sufferers died a few days after birth, as the pemphigus was speedily followed by the dermatitis. The second case was one in which the pemphigus was followed by impetigo contagiosa.

Paralysis of Right Facial and Abducent Nerves.

Schlesinger showed a patient to the Society with complete right side paralysis of the facial and abducent nerves. When the patient was told to look to the right the left globe remained immobile in convergence. There was no congestion of the papilla or fundus, though sometimes there was headache and vomiting. The left facial nerve gave the reaction of commencing degeneration when tested electrically.

From these complex symptoms he attempted to demonstrate by means of a cerebral model that the cause of this paralysis was due to a glioma or cerebral tumour in the floor of the fourth ventricle, or possibly extending from the quadrigemini along the aqueduct of Sylvius.

The Operating Theatres.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

Peritomy by the Electric Cautery.—Mr. H. Work Dodd operated on a man, æt. about 20, who had been admitted suffering from chronic cyclitis in the left eye. The eye had not been well during the last three years, and during that period he had had exacerbation of inflammation. The vision was good, and the iris was not bound down by many adhesions. The eye ached a little continually, there was a little photophobia and some tenderness; the condition was probably rheumatic in origin. The pericorneal area and the neighbouring sclera were injected with blood vessels, and that part of the sclerotic corresponding to the ciliary body was much darker in colour than elsewhere. The patient having been treated at other hospitals by the usual medicines and applications appropriate to the case (so far unsuccessfully) Mr. Dodd thought more vigorous means might be adopted for the man's relief. He said he first thought of removing a circular piece of the conjunctiva and sub-conjunctival tissue down to the sclera from all round the cornea—the classical operation of peritomy—but ultimately, deciding that a greater degree of counter-irritation should be produced, and a larger amount of tissue dealt with than is the case in the usual operation of peritomy, he determined to operate by means of the electric cautery instead of using the knife. After the patient had been anæsthetised, and the eyelids held apart by a speculum, the cautery was applied to the eye in the following manner: The instrument used had a flat spade-like point something under a quarter of an inch broad; this was heated to a dull red heat, and the eye being held with fixation forceps, a whole area all round the cornea, but carefully avoiding that structure, was thoroughly burnt right down as nearly as could be judged to the sclera; this was extended in such a way as to completely occupy externally the position opposite to the ciliary body inside the eye. A little vaseline was put into the conjunctival sac and the eye bandaged and the patient sent back to bed. Mr. Dodd pointed out that the effect he aimed at was very much that which is obtained by the veterinary surgeon in firing a joint. He drew attention to the fact of the thoroughness, depth and breadth of the application of the cautery to the area treated; the effects he hoped to get from this would be, he considered, much more efficient than those which could be obtained from the milder operation of peritomy, which acted chiefly by cutting off the superficial blood supply to the cornea; but, in the operation he had just performed, counter-irritation with regard to the ciliary region was what he aimed at, and that was his object in extending the cauterisation thoroughly all round the ciliary area. To burn down to the sclera, and even to superficially touch the sclera itself, was, he thought, very necessary; but, of course, penetration of the globe of the eye was to be carefully avoided.

It is satisfactory to state that the patient left the hospital about a month after completely well, and when seen some months afterwards there was no evidence of any of the past disease, and the area treated by the cautery looked practically normal.

THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

Operation for Ovarian Hernia, with Twist of Pedicle and Necrosis.—A baby, æt 12 months, was brought to Mr. Stansfield Collier's out-patient room at the hospital on account of a swelling in the left groin. The mother gave the following history:—For six months the baby had had a rupture on the left side, which had been kept back by a truss; four days previously she had found it impossible to push back the rupture; the day before a doctor made an endeavour to reduce the swelling under chloroform, and, not succeeding, had advised immediate admission to hospital. The child had been in pain, and had not slept properly, but had not vomited, and the bowels had acted daily. The baby looked ill. The swelling was situated over the external abdominal ring; its outline was not well defined; the integuments and the left labium majus gave the appearance and feel of solid œdema; over the middle of the lump elasticity was well marked, but not definite fluctuation, nor was there redness. Mr. Collier remarked that at the first glance it appeared probable that the swelling would prove to be an abscess from an infection of a lymphatic gland, but the history pointed to a hernia, and he related three cases of swellings in the groin of babies which had lately been under his care, in all of which œdema of the integuments had been a marked feature: the first proved to be an abscess from disease of the appendix in a hernial sac; the second a twisted pedicle of an ovary, and the third a twisted cord of an imperfectly descended testis. Mr. Henry Curtis, at Mr. Collier's request, operated, making an incision over the upper part of the swelling, and exposed a necrotic ovary which lay in a sac destitute of fluid. The twisted pedicle was composed of the Fallopian tube and the broad ligament close to the ovary. Mr. Curtis transfixed and tied the pedicle above the twisted portion. The ovary and the free end of the Fallopian tube were enormously swollen and black, but still firm and free from smell. The sac was dissected out and the neck ligatured, the wound was sewn up and a collodion film applied. From this case may be learned, Mr. Collier remarked, that one must not lay too much stress upon œdema of the integuments as evidence of an abscess in the groin, and that tense or painful swellings in the groin should be explored without delay.

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"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 19, 1902.

THE TREATMENT OF GASTRIC ULCER.

IN spite of the great advances which have been accomplished in abdominal surgery the surgical treatment of gastric ulcer is still far from satisfactory. So much is this the case that surgeons display no desire to relieve physicians of the responsibility of dealing with patients suffering from this always grave and often fatal lesion. One reason for this, no doubt, is that gastric ulcer owes its origin in large measure to an underlying condition of physiological misery which reduces the reparative forces of the organism and deprives physicians and surgeons alike of that *vis medicatrix naturæ*, which, in other departments of medicine and surgery, is their mainstay. The etiology of the formation of gastric ulcer is ill-understood, but when the ulcer has actually formed we know by experience that it is very apt to recur. It would seem that even when, under suitable treatment, healing of the ulcer has taken place, the cicatricial tissue which remains is unable in all cases to resist the corrosive action of the gastric juice, so that under comparatively slight stimuli fresh ulceration takes place. In view of the uncertain results which follow surgical intervention in these cases the most serious and urgent cases only are thus dealt with, and the mortality is consequently very high. The anatomical conditions are such as often to frustrate the surgeon's best endeavours and leakage is extremely difficult to prevent. It is necessary to draw a sharp line of demarcation between ordinary cases of gastric ulcer in which pain and vomiting are the principal symptoms, and those in which violent hæmorrhage or perforation places the patient's life in imminent jeopardy. In the present state of surgical technique the former are best dealt with medically, but in the latter the surgeon is compelled to intervene if only to give the victim one last chance of recovery. On the other hand, so long as surgeons confine their ministrations to cases verging on the moribund, so long is gastric surgery likely to remain the opprobrium of the art. Gastro-enterostomy has been suggested and practised as an alternative to opening the stomach, but it is obvious that this operation, although it may remedy the gastric stasis which is associated with this condition, cannot have much effect in arresting hæmorrhage. One reason why surgeons are so chary of operating for the relief of hæmatemesis is that even with the stomach open to inspection it is often a matter of quasi-impossibility to discover the particular point from which the blood escapes. The erosion may be so small as almost to defy recognition, yet by the constant hæmorrhage to which it gives rise it undermines the constitution, and if left open ultimately determines death from asthenia. Ulceration short of perforation, as has been pointed out, may sometimes be effectually dealt with by ligatures applied from the outside, advantage being taken of the opportunity to dissect away adhesions which have formed to adjacent tissues. It is to these adhesions that the persistent vomiting and pain are in great measure due. It is to be hoped that surgeons will not be discouraged by the qualified success which at present attends their efforts. The domain of gastric surgery is still open, and the technical difficulties, which at present mar the success of operations, may prove amenable to new and improved methods. Gastric ulcer is a lesion which obviously calls for surgical relief, and it is one, moreover, the treatment of which physicians would willingly relinquish in favour of less tedious and more trustworthy methods of dealing with than those at their disposal.

THE ELECTRICAL TREATMENT OF CANCER.

OF recent years the developments of electricity have been so rapid that our knowledge of the subject has to be frequently revised from the medical standpoint alone. A field full of therapeutic promise, for instance, has been opened up in the treatment of malignant disease, a point to the consideration of which the following remarks will be confined. As everyone knows, the etiology of cancer is still in the air, although the drift of modern opinion has veered round more and more towards the belief that an animal micro-parasite constitutes the *fons et origo mali*. From the point of view of the practical man of medicine, however, a doubtfulness of that kind does not in the least interfere with his steady pursuit of means which, although empirical, will aid him in the relief and the cure of cancer. The operative surgeon has been enabled to record some measure of success in the treatment of early cases in favourable positions of the body, but his field is so strictly limited as to apply to a small percentage only of persons attacked by the disease. In summing up the position, it may be said briefly that both medicine and surgery have hitherto failed to obtain any mastery over this scourge of humanity, which is no less widespread than deadly. The advent of any new method, then, naturally arouses keen interest in the medical world, especially when it arises in connection with an agency that has already achieved wonders in many other directions, to wit, electricity. Hardly had the medical world fairly grasped the practical importance of the Röntgen ray methods in the fields of medicine and surgery than they were confronted with a fresh marvel, namely, the therapeutic effects of exposure to the focus-tube whence the rays were emitted. Here, again, in the lack of more exact knowledge, curative effects were the fruit of empirical observation. As a matter of fact, the cause of the therapeutic result is no more known in 1902 than it was some five years ago, when these observations were first published. No one can say with authority, for example, whether the X-rays themselves are directly and actually concerned with the curative effects following exposure to the focus-tube. Under these circumstances it seems logical to use the non-committal terms adopted by one observer, who suggests the substitution of "focus-tube" for X-ray, as in the phrases, "focus-tube therapeutics," "focus-tube dermatitis," and so on. The matter is of some little importance, as it is to this agency we are looking with hopefulness in the treatment of cancer. Repeated success has been reported in the case of epitheliomata and other surface lesions of a malignant nature, especially in carcinomatous nodules recurring in the scars left by operation. Further, at least one deeper seated growth is said to have disappeared under the influence of the rays, but for the present we must remain content with the fact that we have found in the focus tube an additional agent of great power and value in the treatment of malignant invasions on the surface of the body. There is yet another modern form of electricity, however, which promises to outstrip not only the focus-tube, but all other non-surgical methods hitherto devised for the cure of cancer, namely, the application of currents of high frequency of interruption. Ever since the discovery of d'Arsonval, that such currents could be passed into the body imperceptibly, medical electricians have been busy with their investigations. The present position is remarkable with regard to cancer. It may be said that in suitable cases patients improve in weight, general nutrition, loss of pain, and regaining of sleep and appetite in a way that has not hitherto attended any other method. At the same time, in some cases at least, the new growth has disappeared and the patient has been apparently restored to health. It is too early to say as yet whether a permanent cure has been obtained in these cases, but at any rate therapeutic results have been secured which are of the highest palliative value. Further developments of this new method will be awaited with the keenest anxiety. Meanwhile, in spite of our present imperfect comprehension of the principles involved and their clinical application, there can be little doubt that in the focus-tube and the high-frequency apparatus scientific medicine has found two potent weapons in her future warfare against one of the deadly foes of mankind.

SOCIETY JOURNALISM AND THE MEDICAL PROFESSION.

Sir William Broadbent's protest against "Spy's" caricature of him in our contemporary, *Vanity Fair*, will raise in many minds a doubt as to whether a sense of dignity and the duties of medical etiquette cannot be carried to too great an extent. It will seem to some people to be perhaps just a little absurd to object to a publicity which has been forced in many instances upon the most prominent and distinguished men in the Kingdom, and in point of fact upon the most distinguished of all. "Spy's" caricatures are known all over the world, and there are, we fancy, few who ever considered them to be actuated by malice, or to be anything save a caricature, in the best sense of the term, of a prominent man. This being so, we fancy that Sir William Broadbent's indignant repudiation can hardly be due to a mere sense of affronted dignity, and the question arises, What is it due to? A man in Sir William Broadbent's position would not send a protest to the Press unless he had a good reason for protesting. The reason is perhaps not difficult to find, if one happens to be a reader of the columns of our contemporary. The fact of the matter is—and we fancy that it lies at the root of Sir William Broadbent's action—the attitude of *Vanity Fair* towards the medical profession is one of carefully-studied insult. In almost every issue of the paper some paragraph appears which represents an attempt to depreciate the medical profession in the eyes of the public. It is not so long since an anonymous member of its staff termed Sir William an "ignorant apothecary," and the reason for this gutter-press invective was that its subject attempted to save the public generally from becoming the victims of one of the many imaginary cures for consumption. Further, in the very number of *Vanity Fair* in which appears the caricature complained of, there is one of a series of articles on medical specialists which, even after every allowance has been made for attempts at humour and the exigencies of shortness of "copy," can admit of no other interpretation than that the series was meant to draw contempt on the medical profession. There is as much difference between *bona fide* attempts to write in amusing and witty fashion of the prosaic things of this world and the insulting lampoon as there is between "Spy's" caricature and the series of articles to which we have alluded, where every suggestion, from gross ignorance to actual moral impropriety, is made against an honourable profession. We do not want to suggest that our contemporary keeps all his insults for the medical profession, for that is not so. Paragraphs frequently appear regarding political or other opponents which make even holders of the same political creed as our contemporary wonder what was the origin and education of the writer. Members of every profession suffer from their personal idiosyncrasies, and, in a small proportion of cases, idiosyncrasy is a mild term by which to stigmatise their moral obliquities, but that does not make their profession, as a whole, a fitting subject of insult. As well condemn a writer in the *Times* or *Spectator* for the ill-bred effusions of another journal. Newspapers have their public, and must write up or down to their level as the case may be. We find it, however, difficult to believe that the public of *Vanity Fair* demands or requires such writing down as at times, disfigures the columns of that journal. It is little wonder that a prominent member of the medical profession should object to the unauthorised appearance of his caricature amidst the surroundings in which he finds it, even though the same caricature in other surroundings could be regarded as nothing save a compliment. To find in one part of a journal a slanderous article on the profession to which we belong, and in another part our own unauthorised portrait, or caricature, is quite enough to raise the indignation of any honourable man.

Notes on Current Topics.

Modern Mithridatics.

The announcement of the discovery of a serum for whooping-cough—a discovery the value of which we are not as yet in a position to affirm, follows in the wake of the preventive inoculations for diphtheria, anthrax, tetanus, hydrophobia, pyæmia, &c. The list is already of respectable length, and the immunity afforded by these various sera is indisputable even in respect of those whose curative powers are still somewhat uncertain. We seem to be in a fair way to realise the feat of King Mithridates in inuring ourselves against the various poisons which threaten our frail existence. The results achieved by this potentate in the domain of toxicology are inconclusive and ill-authenticated, but those of our scientific investigators repose on a sounder basis. Unfortunately, modern discoveries in immunisation bear for the most part on diseases which each one of us is reasonably entitled to hope he may escape in the natural course of events. Nevertheless, if we knew positively that the immunity afforded by these sera would be durable it might be thought desirable by the more prudent to run through the gamut of vaccinations. As a matter of fact, however, the duration of the protection is in every instance a moot point, and as in some instances it probably only lasts a month or two, it hardly seems worth while. Immunity against typhoid fever, pneumonia, syphilis, scarlet fever, and old age, would be highly appreciated, but they are not yet on the market. The time may come, nevertheless, when the maxim *medicina tota in observationibus* will have to be modified in favour of prevention.

Berlin Conference on Tuberculosis.

It is characteristic of the altruism of medicine that all the gleaners in the field of medical science willingly contribute to the general stock of knowledge. The amount, like a rolling snowball, grows until its proportions attain a size that even professional men need to be reminded of. In telling the story of accumulated knowledge, diffusing it abroad, and exciting interest in special subjects medical conferences play an important and useful part. But, as a rule, they themselves contribute little to our information on obscure subjects, and too often the early workers in the field are lost sight of, and honours justly theirs bestowed on others. The recent Congress on tuberculosis in Berlin is a good example of this. The whole proceedings might be read from start to finish without discovering any recognition of the claims of British workers, though the whole of our knowledge of the etiology and treatment of the disease is their work. As far as British writers and physicians are concerned, Bodington has lived in vain; at least, his views were not accepted until they came back to us with the legend, "made in Germany," and rechristened the "Nordach" treatment. Yet the reader of Ziemssen finds nothing to warrant the claims of Germans to this, the greatest triumph of the physician during the nineteenth century. Now Ziemssen's cyclopædia was commenced about 1872, more than thirty years after George Bodington's modest essay of thirty pages. And to-day, we cannot better Bodington's therapeutics, "the most important remedial agent in the cure of consumption, that of the free use of a pure atmosphere; not the impure air of a close room, or even that of a house generally, but the air out of doors, early in the morning, either by riding or walking. The diet nourishing, consisting of boiled egg, fresh meat, milk and bread, and two glasses of sherry in water daily." We need not multiply examples, but we may just name as workers, Lynch, McCormac and Ryan, names familiar to students of British medicine, though seldom referred to in the medical literature of the day.

An Automatic Fever Indicator.

It is obviously of great importance to know exactly when the temperature of a given patient reaches its maximum, a point which may fail to be ascertained should it fall at a time intermediate between the regular hours for taking the temperature. Moreover, the mere fact of the temperature attaining a certain elevation constitutes an indication for antipyretic measures calling for immediate attention. In order to fulfil these desiderata an ingenious French physicist has invented an apparatus which sets a bell ringing when the fever rises above the point at which it has been set. The essential part of the apparatus is a clinical thermometer in which the mercury on rising completes an electric circuit. This index-thermometer is placed in the patient's armpit, and connected up with a bell circuit which rings in the house-physician's room, warning him of the necessity for his presence. It is claimed that this device will render it possible to reduce the number of nurses, but this sanguine view is based on a misconception, because taking the temperature is perhaps the least important of the nurse's multiple duties. Many other automatic apparatus will be necessary before we can deplete the nursing staff of our hospitals.

Personation and the General Medical Council.

A correspondent has written us sharply criticising our recent leading article on "Personation and the General Medical Council." He interprets the remarks made with regard to that body as an assertion that the Council will not accept responsibility, and, further, neglects its duty in that direction. That impression certainly does not represent our view, which suggests that the Coun cil fails to put a reasonable effectual check upon personation because of the radical defects of a system which is no system. Our correspondent asks, What should be the duty of the Council in the prevention of unqualified practitioners? Should a person be employed in each town to watch every medical name-plate that is put up, and to investigate the *bona fides* of the newcomer? We decidedly think that something should be done in every such case, and fail to see why special officers for the purpose should not be appointed by the Council, which has accepted th responsibility of maintaining the integrity of the "Register." One official could manage several counties were the Council to establish some simple system of communication with medical men throughout the United Kingdom, asking for information as to newcomers. The present plan adopted by the Council is unworthy of confidence. Reform in this direction we regard as closely connected with the recasting of the General Medical Council with fresh powers and a fresh constitution. A popularly elected and popularly controlled governing body would be more likely to handle with firmness and wisdom a question so vital to the material interests of the profession as that of personation. Medical men would hardly grudge the spending of money upon practical issues that would add so materially to their own safety and protection. Increased funds would readily be obtainable from compulsory annual registration, and would repay the profession a thousand-fold. What is wanted is a Council with the popular interests at heart.

Body Snatching in America.

Great scandal has been caused in Indianapolis by an epidemic of body snatching, and twenty-five persons have been indicted for aiding or abetting in the commission of the offence. Five of the inculpated are physicians charged with complicity in that they neglected to keep a proper register of bodies received for dissection. It was stated by one of the witnesses that upwards of a hundred bodies had been "snatched" during the past year. Obviously such things ought not to be, but their very occurrence is *prima facie* evidence of a lack of provision for the requirements of anatomical studies, otherwise it would not be worth while to take all this trouble. The abuse in this country was stamped out once and for ever by an Anatomy Act which rendered it possible to obtain anatomical material without desecrating graves, or converting, as did the celebrated Burke, living beings into subjects for dissection. It is odd that our American contemporaries in commenting on the scandal do not point out this obvious moral.

Moral Insanity.

A form of insanity which is apt to escape recognition is that in which the sexual instinct furnishes the "irresistible impulse." It is possessed of considerable medico-legal interest, although at present it would be idle to plead even attenuated responsibility in favour of prisoners charged with sexual crimes. Aberrations of the sexual passion are, however, among the most marked and obstinate manifestations of mental defect or impairment, but, unless they happen to be associated with depreciation of one or other of the higher intellectual faculties, the law declines to take cognisance thereof. These aberrations are specially well-marked in neurotic subjects, more particularly in those of epileptic descent, a fact which affords *prima facie* proof of the neurotic origin of the impulse. There is a close connection between certain forms of sexual aberration and homicidal proclivities, and this is another proof of mental derangement. In short, these abnormal sexual manifestations are in a large proportion of instances merely premonitory of grave psychical disturbances, and it behoves criminal psychologists to study them from this point of view.

The Holding of Inquests.

It has long been matter of common belief that the present death registration and death certification machinery of the United Kingdom is in so unsatisfactory a condition as to demand early reform. When that issue is fairly placed before the Legislature one of the points that will have to be "fairly and squarely" faced will be that of the coroner's duty with regard to the holding of inquiries into deaths where the certificate of a registered medical man is not forthcoming. A specific direction to coroners to hold inquests upon all uncertified bodies would raise the whole question of proper and efficient death registration in a practical and far-reaching manner. With a threat of that kind constantly hanging over his head the unqualified practitioner would soon be inclined to take a less rosy view of his irregular calling. The permissive nature of medical registration would also be in all likelihood rendered practically needless, for no medical man would care to attend cases of illness with an ever-present risk o subjecting the friends of his patients to the unpleasantness of a public inquest. No medical practice could survive a sham of that kind for any length of time. At present a coroner is directed to hold an inquest where there is reasonable cause to suspect that any person has died either a violent or an unnatural death, or has died a sudden death of which the cause is unknown. On the whole it seems likely that coroners hold too few rather than too many inquests. The latter view is usually advanced by local authorities who object to open their purse-strings for the general protection of the public.

Should the Appendix be Outlawed?

CURIOUS as it may appear, the question has been raised whether the surgeon is justified in removing the vermiform appendix when he comes across it in the course of operations undertaken for other reasons than appendicitis. Dr. Howard Kelly, of Baltimore (*a*), has been at the trouble of catechising his surgical *confrères* on the subject. The replies show that, as might be expected, no uniformity of opinion exists as to the propriety of removing the appendix in the absence of obvious disease, and the majority answered in the negative. When, however, the appendix is slightly adherent to neighbouring structures, most surgeons declared it their practice to remove it. This conclusion is so obviously in accordance with general surgical principles that it hardly seems to have been worth the trouble to obtain it. The fact that the appendix has no known function does not prove it to be a functionless organ, although, as Dr. Kelly observes, we are in the habit of assuming this to be the case. It is confidently asserted that the normal appendix never contains fæcal concretions, and among other reasons which may be held to justify its removal the presence of such concretions is one. Moreover, it is urged, not without a show of reason, that the existence of an appendix long enough to enter the field of an adjacent operation exposes the patient to the risk of subsequent adhesions and should therefore be removed. The outcome of Dr. Kelly's experience is that the appendix should always be examined and its condition noted whenever the abdomen is opened, provided no additional risk is entailed thereby; that its removal is justifiable when it is found to be slightly adherent, when it contains fæcal concretions, and, as a matter of routine, in operations for the removal of the right ovary, in order to obviate the risk of adhesions.

Statues of Medical Men.

PHYSICIANS and surgeons and scientists generally are but slowly coming to their own. The man who usually wins popularity is one who appeals to the sentiment of the populace and in his life and work arouses the emotional nature of the people. Comparatively few memorials to medical men can be found at Westminster Abbey or in St. Paul's. Our provincial towns are not without monuments to local celebrities and forgotten benefactors, but permanent records which may remind the man in the street of the labours of medical practitioners who have passed to the majority are rare indeed. And, as far as we can remember, the only members of the nursing profession who have been fixed in imperishable stone or metal are Miss Florence Nightingale and "Sister Dora." We are glad to find that there is a growing tendency to accord to medical men honour and justice in regard to this matter, and we note with pleasure that outside the very beautiful town hall at Colchester, "the oldest town in England," an elegant marble statue has been erected of Dr. William Gilberd, the famous physician to Queen Elizabeth. But 1540-1603, during which years Gilberd lived at Colchester, throws us back to almost forgotten days. Still it is well that at the commencement of the twentieth century this distinguished scientist should have his memory rescued from oblivion. But it should be remembered that the statue has been presented to the Corporation of Colchester by the medical profession in that town.

The Pathology of Articular Rheumatism.

IT is extremely probable that under the genera designation of articular rheumatism are comprised several distinct morbid processes which a certain clinical similarity has caused to be grouped under one head. This assumption would go far to explain the want of uniformity which obtains in the onset, course and termination of these cases. The view is steadily gaining ground that the typical acute articular rheumatism is an infectious disease, its subsequent course being largely determined by individual constitution. Just as certain persons become infected with tuberculosis by reason of defective resistance on the part of particular tissues, so others are amenable to the rheumatic poison in consequence of a morbid proclivity on the part of the serous membranes. The joint structures are made up of delicate tissues upon which devolves a large amount of work, and any depreciation of vitality renders them amenable to morbid influences. We witness this depreciation of vitality in association with chronic alcoholism, renal disease, and in certain blood dyscrasiæ such as hæmophilia and scurvy. To these secondary and accessory states must be attributed the persistence of the rheumatic process beyond the average. This predominance of the personal factor must not blind us to the variable nature of the constitutional disturbance which may pave the way to inflammation of the joint structures, and the effects of the salicylate medication will often assist in the differential diagnosis. Cases which resist this treatment should always be regarded with suspicion, and search made for another explanation of the symptoms.

Glycosuria and Graves' Disease.

GLYCOSURIA, if not a constant, is a very common symptom in the subjects of Graves' disease, and the relationship between the two is an interesting point in the pathogenesis of the latter affection which has not yet been satisfactorily explained. True diabetes is also met with in this connection, but in a somewhat smaller proportion. Glycosuria in any form is vastly more common in females suffering from exophthalmic goitre than in males, the proportion being several times greater than that of the occurrence of this disease in the sexes respec-

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(*a*) *Journ. of the Amer. Med. Assoc.*, No. 17, 1902.

tively. In view of these facts, it is difficult to accept as probable the view that the coexistence of glycosuria and Graves' disease is of the nature of a coincidence only. Moreover, it has been noted that when the glycosuric element is present the prognosis is thereby aggravated, suggesting that the constitutional impairment is greater than in the cases in which it is absent. The administration of thyroid extract in these cases provokes at first an increase in the excretion of sugar, but when this treatment has the effect of improving the characteristic manifestations of the fundamental disease, it also determines a decrease in the output of sugar. It is now generally admitted that in all probability Graves' disease is due to the perverted action of the thyroid gland or of the parathyroids, or both, and it is possible that functional disturbance of these glands may also account for the occurrence of diabetes. It is worthy of note, on the other hand, that the administration of large doses of thyroid extract is often followed by the temporary appearance of sugar in the urine when it was previously absent. It may reasonably be inferred that the two morbid conditions have some common factor, and that factor may be either a disturbance of circulatory equilibrium or a far-reaching influence on metabolic exchanges.

Friendly Societies and Sanatoria for Consumptives.

If the sanatorium treatment of consumption is ever to be placed on a footing at all commensurate with the requirements of the labouring population it can only be on the initiative of friendly societies and similar associations. They have every incentive to take the matter in hand, because the sickness allowances of their consumptive members constitute a heavy drain on their resources which, under existing conditions, remain until the malady terminates in death. Dr. Hillier's suggestion that deputations from the friendly societies of this country should visit Germany to observe the administration of the State Sick Insurance Fund has much to commend it, if for no other reason that it may stimulate them to take into consideration the desirability of adapting the system to their own requirements. Each friendly society might have its own camp for consumptives, a plan which offers many advantages over the erection of costly sanatoria which could only accommodate a limited number of inmates.

It is officially notified that His Majesty has consented to open in person the new out-patient department of the London Hospital at a date to be subsequently fixed.

The late Dr. Thomas Fitzpatrick, F.R.C.P., has bequeathed the sum of £1,000 to Trinity College, Dublin, to found a prize which shall be awarded to the candidate who obtains the highest aggregate of marks at the final examinations in the School of Physic.

Street Accidents.

In all great centres of population it is clear there must always be a certain proportionate number of street accidents. It would be interesting to find out, were the basis of such an estimate obtainable what is the ratio of frequency of incidence of that special class of missadventure to the density of population. The figures recently issued for the metropolis seem almost to suggest that some such relation exists between the two sets of circumstances. The population of London multiplies at a rapid rate, and of recent years a great increase has taken place in the number of persons injured by accidents in the street. For instance, in 1891 and 1892, when the accidents in the day were 4,756 and 4,800, in 1900 and 1901 they reached 8,010 and 7,995. It is probable that the chronic state of obstruction which has been conspicuous in the main thoroughfares of the metropolis for years past is to some extent answerable for that fact. Another element is undoubtedly the multiplication both of traffic and of passengers. With regard to the first-mentioned condition, local authorities throughout the kingdom are prone to place the streets of their towns at the mercy of various corporations without imposing proper restrictions, such as that of continuous work by day and night, time limits, and so on, whereby the duration of obstructions might be reduced to a minimum. Then there is the nuisance of the "crawling" cabs, which impede traffic and add not a little to the dangers of the streets. Another matter that deserves further attention is the provision of footways over or under ground, at points where traffic is busiest. With the utmost exercise of precaution and vigilance on the part of a civil administration, however, a certain margin of street accidents must necessarily occur.

The Alcoholisation of Women.

Temperance reform is now taking its proper place as an essential part of public and personal health. Medical men of the highest distinction are realising that the findings of science have secured a sound basis on which educational effort may be built up. While drunkenness is to some extent diminishing other and more serious forms of alcoholism are on the increase. The saddest and most serious aspect arises from the growing alcoholisation of women. So imminent is the danger, and so subtle and insidious the growth of the drink habit among females in all ranks of society, that we are glad to see that so eminent an authority as Sir Thomas Barlow, physician to the King, on Thursday last at a public gathering in Westminster Church House, dealt with this matter from the medical and scientific standpoint. Sir Thomas, after indicating the more important causal factors which lead women into the thraldom of inebriety, denounced the severely pessimistic attitude of some in regard to the restoration of such, and showed that rest, removal of cause, avoidance of drugs and moral support, afforded sound and, in many instances, effectual treatment. Sir Thomas Barlow has rendered humanity a real service in showing that the best means of securing hygienic righteousness in relation to this matter is to permeate society with the knowledge that it is a superstition to hold that alcohol is needed for the ordinary work of life. We are glad to see that Sir Thomas Barlow advises the rigorous protection of inebriates from the pernicious influence of an alcoholic environment, and insists that they should only be entrusted to the care of those who are themselves abstainers from alcoholic beverages. It is a remarkable evidence of the awakened interest in measures for the prevention and arrest of alcoholism that the present number of *The Practitioner* should be devoted to the special presentation of this matter in a series of articles by experts of distinction.

Lady Practitioners at the Polyclinic.

It is announced that in future lady practitioners will be admitted to the systematic course of lectures at the Polyclinic and Post-Graduate College, although, by the constitution of the College, they are not eligible as members. The Council are careful to add that this does not entail their admission to the clinical demonstrations, an innovation of which they state there is "no probability," so that there need be neither fear on the one side, nor expectation on the other. We must confess that we are quite unable to discover valid grounds for such exclusiveness. It has been asserted that patients object to a mixed audience, but that is contrary to general experience, and the hypothesis that practitioners in general would resent the presence of fellow practitioners of the other sex is quite untenable. This is the only country in the world, we believe, where such restrictions are maintained, and it would be difficult to justify them on any grounds consistent with common sense.

The Staff of St. Bartholomew's Hospital.

Mr. Butlin, one of the surgeons at St. Bartholomew's Hospital, has carried out his intention, as we announced some weeks ago, of resigning his post on the staff. After the promotion of the senior assistant surgeon, a vacancy will be thus created on the assistant staff. For this vacancy we understand that there are so far two candidates—one the present Surgeon Registrar, and the other Mr. McAdam Eccles, of the West London Hospital, and the City of London Truss Society. The election for this latter post will probably not take place until January next, thus there is ample time for the candidates to indulge in that very trying ordeal—namely, a persona canvass of the Governors.

Synthetic Abominations.

The ease with which chemists now ring the changes in the synthesis of odours has flooded the market with a large and ever-extending series of so-called perfumes bringing them within the reach of the humblest. In the educated classes of society the doctrine of personal cleanliness has long since displaced the employment of perfumes which only had their *raison d'être* in the desirability of masking disagreeable emanations, but the need is still felt lower down in the social scale, hence the popularity of these cheap—and nasty—odours. If ladies would only bear in mind that the use of strong perfumes is presumptive evidence of their having an idiosyncrasy of the kind to disguise, they would, perhaps, be more judicious in resorting thereto, and so conduce to the general comfort of mankind.

Medical Men and Stirpiculture.

Medical men, as an educated professional class, are brought into close contact with the social life of the community. Their aggregate influence under these conditions is undoubtedly great, and it probably forms one of the powerful, yet unseen, educational forces at work among the nation. Galton, the well-known enthusiast in anthropology, desires to enlist the medical profession under his banner for the purpose of improving the physical fitness of the race by the science known as "Stirpiculture." He does not ask medical men to advocate the extreme steps of deliberately breeding man by artificial selection as we breed cattle, an experiment for which the philosophy of the world is either too young or too old. He suggests the more practical step of educating parents to consult their medical advisers as to the fitness of children for marriage, and for the production of children of good type. He even hints at the issuing of diplomas of special fitness for marriage by a joint committee of medical men and of lay anthropological experts. Although there is little prospect of his Utopian scheme ever coming into practice, nevertheless Galton does a great service to mankind by calling the attention of the medical profession to the importance of the marriage relationships of their patients to the community at large. Medical men are somewhat apt to lose sight of the wider aspects of their professional life in the hurry and rush of exacting and laborious work, which is but too often at the same time sordid and ill-recompensed.

Phantom Gall-stones.

The symptoms of active cholelithiasis are so strongly marked that it would seem impossible to go far astray in diagnosis. For all that, bedside experience shows that various conditions are apt to lead to error on the part of the medical attendant, who ascribes to the presence of gall-stones phenomena arising from other causes. Among these fallacies may be mentioned locomotor ataxy, which often simulates gall-stones pretty closely, and indeed, has led to operation in several recorded cases. If the medical man be on his guard, this source of error can readily be eliminated by noting the state of the pupils and of the knee-jerk. Right-sided pleurisy has frequently been mistaken for cholelithiasis. Lead colic, again, presents a clinical picture that sometimes leads the unwary into an interpretation of biliary calculus. Ulcer of the stomach is sometimes confused with gall-stones, as well as renal colic and gastralgia. A areful and systematic examination of the patient will in most cases enable the medical man to steer clear of most of the above fallacies. Now and then, however, an accurate diagnosis is impossible, except with the aid of an exploratory laparotomy. For example, without the evidence afforded by an attack of jaundice, it would be extremely difficult to form any trustworthy conclusion in many cases of chronic and severe gastralgia in young or middle-aged women. Among other conditions that have been mistaken for gall-stones may be mentioned various inflammatory states of the liver and biliary passages, as well as more general febrile conditions, such as malaria. Then, after all is said and done, there is always the possibility that gall-stones may be present as a complication of other disorders. The moral of the fallacious gall-stone is to be found in the teaching of constant watchfulness, and of the necessity of full and complete evidence before arriving at a definite diagnosis of gall-stones. The malady may be safely inferred if a patient has suffered often from typical colic, jaundice, biliary, septic conditions, inflammation of gall-bladder, and localised or general peritonitis. A correct diagnosis is of considerable importance, as in the more severe cases prompt surgical interference alone can save the patient from a serious or fatal issue.

Aneurysm Due to Tuberculous Lesions.

Although tuberculous inflammation of the walls of blood-vessels is very common, inasmuch as arteries and veins running through tuberculous organs are readily invaded by the disease, the tuberculous disease itself was not supposed to bear any relation to aneurysm. Even Læunce, in his classic description of multiple pulmonary aneurysm, ascribes the disease to want of support in the vascular walls and not to the tubercle which infiltrated them. In endarthritis the profession found a satisfactory theory for the disease, and reluctantly enlarged their view by adding Koster's mesartritis theory in 1873. To a limited extent simple atrophy and paralytic relaxation of the arterial coats were recognised, not to speak of such gross pathological lesions as syphilitic deposits, sclerosis, and calcification. In cases of tuberculous infiltration the resisting power of the wall of the artery was so weakened, and it had become so brittle, that the older pathologists concluded it would rupture under pressure, without previously becoming increased in its bore or pouching. So satisfied were they of this that they never looked for tuberculous deposit in an aneurysmal wall. M. Heller, however, has given a shock to our fixed ideas on the subject by describing a case of aortic aneurysm at the site of the superior mesenteric artery, which was clearly due to the presence of tuberculous deposit, and the tubercle bacilli found were numerous. When attention is directed to the subject there is little doubt but that other pathologists will confirm M. Heller's views.

Dr. Mary Scharlieb has just been appointed Consulting Physician for the diseases of women to the Royal Free Hospital in Gray's Inn Road.

The Treatment of Epilepsy.

One of the best-known of the monatomic alcohols of the fatty series is amylic alcohol, whose ester nitrate of amyl possesses such a marked influence on the circulatory system. The drug has almost fallen into disuse; its effects were too evanescent to make it of much value in general therapeutics. A new use has been found for the ester. It is proposed to use it as a prognostic means in cases of epilepsy, for those cases in which anæmia of the brain is present prior to and during an attack. Such cases as are benefited by the inhalation of the drug, particularly those cases in which an attack is aborted by its use, are such as Winter, Vidal, Jonnesco, consider would be benefited by resection of the cervical ganglia of the sympathetic, so producing a permanent cerebral bloodshottedness. Winter has collected 213 cases of sympathetic resection for the cure of epilepsy; of these 122 cases were carefully followed, of which number eight have for more than three years remained well; seventeen cases are reported as temporarily cured, this word implying that a period not longer than two years had passed since operation; twenty-three were improved, the attacks being markedly less in severity and number; seven died and sixty-seven were not improved. It is to be hoped that by the use of nitrate of amyl a better selection of cases may be made, and consequently a larger percentage of cases obtained. The cases benefited by the operation are, it should be remembered, just those least amenable drugs.

PERSONAL.

Mr. A. W. Mayo-Robson, F.R.C.S., having, as previously announced, resigned the Honorary Surgeonc to the Leeds Infirmary, has been elected Consulting Surgeon thereto.

The vacancy thus created on the surgical staff has been filled by the appointment of Mr. R. Lawford Knaggs, M.D., M.Ch., F.R.C.S.

Miss Mildred Heather-Bigg has been appointed Matron of Charing Cross Hospital. She was trained at University College Hospital, and is at present Matron of the Chelsea Hospital for Women.

A Royal medal has been awarded by the Royal Society to Professor A. Schäfer for his researches into the functions and minute structure of the central nervous system, especially with regard to the motor or sensory functions of the cerebral cortex.

Henry Maurice Tickell, M.A., M.D., B.C.Cantab., M.R.C.S., has been appointed Assistant-Physician at Dr. Hettinger's Sanatorium for Open-Air Treatment of Lung Diseases, Nordrach, Black Forest, Germany.

Lord Lister, full of years and honours, has received a further mark of distinction in the award by the Royal Society of the Copley medal. This is regarded as the "blue riband of science." It was founded in 1709 by Sir Godfrey Copley for distribution to the living authors of such philosophical research, either published or communicated to the society, as might appear to the Council to be deserving of that honour.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

MANCHESTER.

[FROM OUR OWN CORRESPONDENTS.]

The New Infirmary Board.—The election of a new Board of Management for Manchester's leading charity is now an accomplished fact. Its result is a striking vindication of those who, under the name of the Trustees' Committee, organised a campaign against the old Board and nominated twenty-one gentlemen to form a new one. One of their candidates withdrew his name, and nineteen out of the remaining twenty were duly elected. Thus the nominees of the Trustees' Committee form nineteen out of the twenty-one lay members of the new Board. Seven members of the old Board were elected, quite enough to secure decorous continuity of action. The popular gentleman who has for long acted as chairman of the House Committee was one of the independent candidates. He was elected at the bottom of the poll—another proof of the strength of the Trustees' Committee. His presence on the new Board will give general satisfaction, and no surprise will be felt should he remain chairman of the hard-working House Committee which manages the affairs of the charity from day to day. The three lady candidates have been left out in the cold. Seeing that it was they who forced a contest, and are thus responsible for the trouble and expense of an election, their position cannot but be rather humiliating. The new Board will doubtless at an early date make some arrangements by which their deliberations may be assisted by female intelligence.

The Medical Societies.—Last winter, what with endless committees of the British Medical Association and other interruptions, the societies were all somewhat depressed. The present season has begun much better, and the Medical, Pathological, and Clinical Societies have all held very large and satisfactory meetings. With growing memberships, sound financial positions, and plenty of good fellowship, these institutions promise to do better work than ever. The clinical meetings of the Medical Society are now to be held within the Royal Infirmary, which is certainly the best place for the attendance of patients for exhibition and for members.

BELFAST.

[FROM OUR OWN CORRESPONDENTS.]

The New Medical Institute.

Wednesday, the 26th of this month, will be a busy day for the members of the medical profession in and around Belfast, if the present arrangements for opening the Medical Institute are adhered to. According to these arrangements his Excellency the Lord Lieutenant will open the Institute at noon, Lady Dudley will unveil a memorial window to Dr. William Smyth in the afternoon, and in the evening the annual dinner of the Ulster Medical Society will be held in the Society's new home.

At the morning function the retiring President, Sir William Whitla, will hand over his office to his successor, Dr. John Campbell, and will then hand to the new President the title-deeds of the Institute, his gift to the Society, and the Lord Lieutenant will declare the Institute open. The afternoon ceremony will be for ladies, the wives of the medical men invited to the morning ceremony being invited to it. The details of this programme are not comp'ete yet, but both ceremonies promise to be most interesting.

The dinner will be held in the large hall of the Institute, which will accommodate about 140 if necessary, though about 120 will be more comfortable. To this dinner it is intended to ask a considerable number of guests, including some distinguished medical men from a distance, and some of the leading business men of the city who have shown a special interest in hospital affairs and medical education.

The Institute is now almost ready for the opening ceremony, and is a source of lively satisfaction to all the members of the Ulster Medical Society who have seen through it. It is situated in College Square North, with a frontage of 45ft. to the street and is about 46ft. high. The front is designed in Perpendicular Gothic and built of light-brown stone from the famous Scrabo quarry in Co. Down, with red Dumfries sandstone dressings. Entering through an outer and inner porch, one comes into the inner hall, which is about 24ft. by 16ft. In it the daily papers and lay journals will be kept, and there members may smoke and chat. Separated from it by a beautiful stone arcade, filled in with folding glass doors, is the library, 30ft. by 34ft. The special feature of this room will be the memorial window to Dr. William Smyth, which is effectively placed above the massive stone mantel. It faces the folding glass doors, so is seen from the hall as well as from the library. The library will, of course, be reserved for professional reading and work. Behind these rooms is a small office for the librarian, a council-room, cloak-room, and lavatories. On the first floor is the lecture-hall, about 43ft. by 30ft., and 16ft. high, with a musicians' gallery opening off it. The windows are all double, so as to minimise the sound of street traffic, and in every detail it has been most carefully planned to suit the needs of the Society. On the wall at one end are a permanent blackboard and lantern screen, and the tables used for dinners fold up and form the platform for less festive occasions. Behind the lecture-hall are kitchen and serving room.

On the second floor is the billiard room. On the same floor are the caretaker's apartments and another lavatory. The whole building is lighted by electricity. Perhaps the most striking point about the Institute is the beauty of the woodwork. It is a point to which the architect, Mr. William J. Fennell, M.R.I.A.I., loves to devote special attention, and as the generous donor of the Institute has marked artistic tastes, he has given the architect a very free hand in adorning the building in this way. One point more should be mentioned in speaking of adornment. On the front of the building are four beautifully cut heads, life size. They are Professor Redfern and the late Professors Andrews and Gordon, and Dr. Henry MacCormac—men who deserve to be long remembered by the medical profession in Ulster.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

FIBROIDS AND THE MENOPAUSE.

To the Editor of The Medical Press and Circular.

Sir,—The report of the meeting of the Obstetrical Society contained in this journal for November 12th credits me with the statement that I regard the belief that fibroids shrivel at the menopause to be a superstition. This is not correct. In reply to a question deliberately put to me by the secretary, I said it was a superstition that fibroids *disappeared* at the menopause. My views on this question are founded on a broad and careful study conducted for many years, and they are formulated in the subjoined extract from the second edition (1901) of my book on "Tumours," p. 217.

"It is not only true that fibroids arise during menstrual life, but it is equally certain that they influence menstruation, and I have operated on many cases in which this disagreeable phenomenon has been as profuse between fifty and fifty-five as it was at twenty.

"This fact does not in any way disturb the rule that when a woman with a fibroid in her uterus attains the menopause the tumour may cease to grow. That they disappear ('dry up' is an expression in common use) after the menopause is an event almost as rare as the advent of a comet.

"*Myomata sometimes take on an unusually rapid growth with the cessation of menstruation.*"

I am, Sir, yours truly,
J. Bland-Sutton.

47, Brook Street, Grosvenor Square.

Medical News.

Gordon Memorial College.

The Gordon Memorial College at Khartoum, recently opened by Lord Kitchener, has been presented with chemical and bacteriological research laboratories by Mr. H, S. Wellcome, and these will shortly be installed. Dr. Andrew Balfour has been appointed director, and advantage will be taken of the exceptional opportunity thus afforded for the study of tropical diseases.

Docking the Salary of a Medical Officer.

The Local Government Board have written declining to sanction a higher commencing salary than £120 for the medical officer of the City of London. It must be a very exceptional experience for the Board to have to criticise a salary on the ground of its being in excess; as a rule, its intervention is invoked in the opposite direction.

Dinner to Dr. Joseph Smith.

A complimentary dinner was given last week at the Trocadero Restaurant to Dr. Joseph Smith, in appreciation of his courage in coming forward, in response to the request of his brother practitioners, as a candidate at the recent election to the General Medical Council. Dr. Ambrose, M.P., presided, and complimented Dr. Smith on the way in which he had fought an unequal contest. The paragraph report of the dinner which went the round of the Press is headed "General Medical Council," which is rather misleading, for that body does not feed in public.

Fire at St. George's Hospital.

An alarm of fire was raised in one of the wards on the first floor at St. George's Hospital on Sunday evening, and created much excitement. Fortunately, the timely application of a few buckets of water extinguished the flames, and when the firemen arrived little remained to be done. The circumstances under which the accident occurred are to be closely investigated.

Deaths under Chloroform.

An inquest was held at Poplar last week on a man, aged 50, who succumbed to chloroform narcosis while being anæsthetised preparatory to amputation of a finger. A verdict of death from misadventure was returned.

A lady, the wife of an officer in the Army, died under chloroform last week at the Connaught Hospital, at Aldershot. The drug was administered for the purpose of attempting the reduction of an old-standing dislocation of the elbow, but death supervened before anæsthetisation was complete. At the post-mortem examination fatty degeneration of the heart was discovered.

Schedule of Standards for Pharmacopœial Preparations issued by the Local Government Board of Ireland.

We have received from the Irish Local Government Board a copy of the recently-issued schedule of standards for pharmacopœial preparations. The list is a small one, containing only 108 preparations, and many of the pharmacopœial preparations more used are not included, although some little-used ones find a place. We think the percentage of morphia present in the compound tincture of chloroform and morphia should be stated. Why aromatic spirits of ammonia, spirits of cajeput, and sweet spirits of nitre are left out is difficult to understand. The list is, however, intended for analytical chemists as a minimum standard; but we fear that contractors will take it as the maximum standard and neglect the higher standard of the Pharmacopœia. The list will have an injurious effect on the quality of the drugs supplied. At present the tendency of the trader prosecuted under the Adulteration Act is to declare that there is a "trade" standard as well as a pharmacopœial one. In the future he will flourish the Irish Local Government Board standard as an authoritative document in the face of the magistrate. It will be a strong proof that the authorities in Ireland considered the pharmacopœial standard too high, and refused to hold medicine contractors to it. The best thing to do with the list is to withdraw it from circulation.

Death from Cocaine.

An inquest was held at Rochdale last week on the body of Dr. Daniel McIntyre, of that city, as the result of poisoning by cocaine. It appears that the deceased had put some crystals of the alkaloid into an aching tooth for the relief of pain, and it is surmised that he must have swallowed it. A verdict of accidental death was arrived at, and great sympathy was expressed for Mrs. McIntyre and her family.

The Harveian Society.

The annual dinner of the Harveian Society of London will take place at the Café Monico December 11th, at 7 p.m. Mr. W. Cheyne will be in the chair. The following gentlemen have promised to be present:—Sir William Taylor, Sir Frederick Bridge, Sir James Reid, Sir James Crichton Browne, Colonel Stephenson, and the Presidents of the College of Physicians, Hunterian Society, Medical Society, Royal Medical and Chirurgical Society, and West London Medico-Chirurgical Society.

Precautions Against Measles.

The London County Council has been asked by the London School Board to extend to measles the provisions of Section 68 of the Public Health (London) Act, 1891, which prohibits, without proper precautions, the exposure in a public place of any person suffering from a dangerous infectious disease, and also the transmission of infected articles.

Miners' Anæmia.

The prevalence of anæmia among the miners at Dolcoath, Cornwall, has been investigated by the Inspector of the Local Government Board, and is found to be due to *dochmius duodenale*, a parasite not known to exist in this country, though common in Egypt.

Dublin Death-rate.

The deaths registered in the Dublin registration area for the week ending Saturday, November 8th, 1902, represent an annual rate of mortality of 31·4 per 1,000 of the population. Diseases of the respiratory system caused 57 deaths; diseases of the nervous system, 11 deaths; diseases of the circulatory system, 27 deaths; and 38 deaths resulted from tuberculous disease. Within the city in North Clarence Street district the death-rate was 36·8; in Summerhill it was 36·9; in Lisburn Street, 41·6; in Blackhall Place, 37·9; in South Earl Street, 38·1; in Castle Street, 51·8; and in Peter Street, 38 per 1,000. Ninety-six infants died during the week, of whom 45 were under one year old.

Trinity College, Dublin.

The following gentlemen have passed in Anatomy and Institutes of Medicine:—Henry H. A. Emerson, William Nunan, Thos. T. H. Robinson, John Chambré, Winslow S. S. Berry.

Royal College of Physicians and Surgeons.—Final Examination.

Candidates have passed this examination as undernoted:—A. Charles, F. H. Cooke, W. F. Delany, W. J. Greehy, D. Jones, F. J. Moore, R. C. Nicholl, T. J. Nicholl, W. J. O'Doherty, R. O'Flaherty, R. H. G. Oulton, P. W. Power, L. G. de Rosario.

Inadvertently omitted from the list of those who passed the Second Professional Examination, Part 2:—

Honours—E. L. Sheridan.

Pass—W. Sheahan.

Public Health:—With Honours—Miss E. A. Sproull, M.B., B.Ch., Edin. Univ.

Pass—C. L. Birmingham, M.D., R.U.I.; D. S. Browne, L.R.C.P. and S.Ed.; E. A. Husein, L.M. and S.; T. C. Lauder, L.R.C.P. and S.I.; Miss E. Macrory, M.B., B.Ch., Edin. Univ.; E. F. Stephenson, F.R.C.S.I.; J. G. Willis, L.R.C.P. and S.Ed.

Preliminary:—Honours—A. E. E. Davis, A. W. Hughes.

Pass—M. B. Dooly, J. Ellenbogen, F. E. G. Greer, H. J. Hedley, H. S. Johnston, P. D. McCreery, P. J. McKevett, C. McQueen, E. J. Quirke, E. Ryan, M. G. H. Sampson, L. D. Woods.

Notices to Correspondents, Short Letters, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

Dr. W. W. Murphy —The flower you sent is a specimen of *Anagallis arvensis* (Red Pimpernel, Shepherd's Hour Glass). It is not an uncommon herb in fields and waste places. We cannot state anything regarding its medicinal qualities, beyond that it is sometimes said to be poisonous.

THE EVOLUTION OF POSTERITY.

The responsible section of trans-Atlantic anthropologists and legislators have come to the practical conclusion that "the man of the future" is to derive his genesis from the great Mountain State. Accordingly the Colorado Legislature has applied itself to the realisation of this praiseworthy ambition, by introducing a law which permits only well-developed persons, of well attested physical and moral health, to enter into the bonds of holy matrimony. And, of the selected partners, the male must have attained a minimum age of twenty-five and the female of twenty-two. Both must be thoroughly free from personal or hereditary taint of tuberculosis, insanity, epilepsy, asthma, as well as all other kinds of organic or hereditary disease. They must not be more closely related than by the fourth degree of cousinship. No one will be allowed to marry without a proper certificate, and for the enforcement of this law, county boards of medical examiners are to be formed. It is hoped that by its means all persons of inferior physical and moral constitution will be debarred from the undesirable privilege of transmitting their infirmities to an unhappy posterity. And, as the *Medical Age* observes, it can now only be hoped that the praiseworthy citizens of Colorado will find it as simple a matter to dispose of a deep-seated evil as it is to propose a remedy. If Jove laughs at lovers' vows the attempts of legislatures to control Cupid's eccentricities must excite a rictus.

G. P. (Leeds).—We do not consider that the charge was excessive.

M.D. (North Shields).—A member of the Royal College of Physicians London is by the bye-laws of his College, prohibited from dispensing his own medicines. He labours under various other disabilities, which you will find duly set forth in the regulations.

Dr. Belbord.—We understand that steps are being taken to bring the case under the notice of the General Medical Council.

THE TREATMENT BY HIGH FREQUENCY CURRENTS.

Senex writes: "I should be obliged if any of your readers could inform me whether a neurasthenic patient would be likely to benefit from treatment by high frequency currents."

F.R.C.S —Our correspondent has failed to enclose his card. We cannot deal with anonymous communications.

ANOTHER ADVERTISING MEDICAL ASSOCIATION.

A correspondent sends us a cutting from a local newspaper announcing the opening of a "Medical Association" for the Chesterfield district, with a surgery at Cluman Gate. It is artfully worded in that it contains no direct appeal for members, but it is perilously near the line.

Meetings of the Societies, &c.

LONDON.

Wednesday, November 19th.

Royal Microscopical Society (20, Hanover Square, W.).—8 p.m. Paper:—Dr. P. E. Shaw: An Electrical Method of Taking Microscope Measurements. Demonstrations:—Dr. D. H Scott: The Microscope in Fossil Botany.—Dr. E. J. Spitta: An Apparatus for Obtaining Monochromatic Light with the Mixed Jet.

Thursday, November 20th.

Harveian Society of London (Stafford Rooms, Titchborne Street, Edgware Road, W.).—8.30 p.m. Mr. A. Doran: Uterine Fibroids: Considered from a Clinical and Surgical Standpoint. (Harveian Lecture.)

Medical Graduates' College and Polyclinic (22, Chenies Street, W.C.)—Dr. Lewers: Cancer of Uterus.

Friday, November 21st.

Epidemiological Society (11, Chandos Street, Cavendish Square, W.).—8.30 p.m. Paper: Lt.-Col. A. M. Davies, R.A.M.C.: What is Climatic Disease?

Society for the Study of Diseases in Children (11, Chandos Street, Cavendish Square, W.).—5.30 p.m. Cases and Specimen will be shown by Mr. F. Deas, Dr. H. Ashby (Manchester), Dr. C. O. Hawthorne, and Mr. R. C. Dun (Liverpool). Paper:—Dr. G. A. Sutherland and Mr. T. Walker: A Case of Syphilitic Arteritis and Nephritis in an Infant.

Tuesday, November 25th.

Medical Graduates' College and Polyclinic (22, Chenies Street, W.C).—Dr. Patrick Manson: Sprue.

DUBLIN.

Friday, November 21st.

Royal Academy of Medicine in Ireland.—Medical Section—Dr. Finny: A Case of Erythema Marginatum. Paper:—Dr. Finny: Erythema Marginatm. Drs. Bewley and Scott: A Case of Lymphadenoma with Persistent Pyrexia. Dr. Travers Smith. A Case of Paroxysmal Tachycardia Associated with Epilepsy. Dr. Joseph O'Carroll: A Case of Paroxysmal Tachycardia.

Appointments.

Ahern, John M., M.B., B Ch., B.A.O., R.U.I., L.R.C.P. and S.I., Deputy Medical Officer, H.M. Prison, Liverpool.

Allen, R., M.B., B.Ch., R.U.I., Assistant Pathologist to the Royal Hospital, Belfast.

Beddard, A. P., M D.Cantab, Assistant Physician to Guy's Hospital.

Bond, Francis, M.D.Lond., F.R.S.Edin., Medical Officer of Health for the Thornbury (Gloucestershire) District Council.

Bridger, J. F. E., M.R.C.S., L.R.C.P.Lond., Medical Superintendent of the Small-pox Hospital, Pelican Island, Barbados, and Medical Referee to the General Board of Health of the Colony.

Cosgrave, F. R., M.D., B.Ch.Dub., Appointed District Medical Officer of the Rochdale Union.

Craig J., M.D.Dubl., Assistant in the Ophthalmic Department of the Royal Hospital, Belfast.

Davies, T. A., L.R.C.P.Lond., M.R.C.S., Assistant House Surgeon to the Newport and Monmouthshire Hospital.

Gregory, A., M.R.C.S., L.R.C.P., House Physician to the General Infirmary, Leeds.

Houston, T., M.D., R.U.I., Medical Registrar to the Royal Hospital, Belfast.

Milward, F. Victor, B.A., M.B., B.C.Cantab, F.R.C.S.Eng., Surgical Casualty Officer to the General Hospital, Birmingham.

Platts, Sydney, M B., B.Ch. Victoria, House Surgeon to the General Infirmary, Leeds.

Ryan, John P , L.R.C.P. and S.I., appointed Senior House Surgeon to Jervis Street Hospital, Dublin, *vice* Edmund Glenny, L.R.C.P. and S.I., resigned.

Saxton, E., L.R.C P. and S.Edin., L.F.P. and S.Glasg., Medical Officer and Public Vaccinator for the Trentham District by the Stone (Staffordshire) Board of Guardians.

Scatchard, T., L S.A., House Physician to the General Infirmary, Leeds.

Stansfield, F. J., M.R.C.S., L.R.C.P., House Surgeon to the General Infirmary, Leeds.

Vacancies.

Banstead Road School, Sutton, Surrey (for Ringworm Children, under the Metropolitan Asylums Board).—Visiting Medical Officer. Salary £100. Application to the Clerk of the Board, Embankment, E.C.

Beverley Dispensary and Hospital.—Medical Officer and Dispenser (non-resident). Salary £160 per annum. Applications to C. J. Arden, Clerk.

Hospital for Sick Children, Great Ormond Street, London, W.C. Resident Medical Superintendent. Salary 100 guineas per annum, with board and residence in the hospital and £5 washing allowance. House Physician. Salary £20, washing allowance £2 10s., with board and residence in the hospital. Candidates must be unmarried and possess a legal qualification to practise. They will be required to attend before the Joint Committees at their meeting on Wednesday, November 26th, 1902, at 5 p.m. precisely. Application to Adrian Hope, Secretary.

London Hospital, Whitechapel. E.—Medical Registrarship. Salary £100 per annum. Applications to G. Q. Roberts.

Middlesbrough County Borough Asylum, Marton-in-Cleveland, Yorkshire.—Assistant Medical Officer. Salary £130 per annum, with furnished apartments, board, and washing. Applications to the Medical Superintendent.

New Ross Union.—Medical Officer. Salary £125 per annum, together with the usual Vaccination Fees, one who will also act as Medical Officer of Health: salary, £15 per annum. Applications to P. A. Pope, Clerk of Union. (See Advt.)

Royal College of Surgeons.—Conservator of the Museum. Salary £105. Applications to James Robertson, Clerk of the College, 54, George Square, Edinburgh.

St. Pancras and Northern Dispensary, 126, Euston Road.—Resident Medical Officer. Salary £105 with residence and attendance. Applications to the Hon. Sec, H. Peter Bodkin, 23, Gordon Street, Gordon Square, W.C.

St. George's Hospital Medical School.—Secretary. Salary £150 with emoluments. Applications to the Dean of the Medical School, St. George's Hospital, S.W.

Worcester County and City Asylum, Powick, near Worcester.—Assistant Medical Officer. Salary £140 per annum. Applications to Medical Superintendent.

Yorkshire College, Leeds.—Department of Medicine.—Senior Demonstrator of Pathology. Salary £150 per annum. Applications to the Dean.

Births.

Musson.—On Nov. 14th at 15, King Street, Clitheroe, Lancs., the wife of Alfred W. Musson, M.B., B.C., Cantab., of a son.

Marriages.

Hay- Syms.—On Nov. 11th at Christ Church, Surbiton, Malcolm Bell Hay, M R.C.S., L.R.C.P., only son of the late T. B. Hay, of Christchurch, New Zealand, to Minnie, second daughter of F B. Syms, Esq. Lanreath, The Avenue, Surbiton.

Perry—Hull.—On Nov. 12th, at Blackmore, Essex, Frederick William Perry, L.R.C.P.I., M.R.C.S.I., to Ellen, younger daughter of Thomas Read Hull, of Jericho, Blackmore, Essex.

Sapwell—Ireland.—On Nov. 11, at the Church of St. Peter, Sheringham, Benjamin Beckham Sapwell, B.A., LL.B. M.B., B.C.Cantab, eldest son of B B. Sapwell, of Sankever, Aylsham, Norfolk, to Jessie Anna, youngest daughter of the late A. W. Ireland, Guestwick Hall, Norfolk,

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Original Communications.

ABSTRACT OF PAPER ON SUPRA-PUBIC CYSTOTOMY IN CASES OF TUMOUR OF THE BLADDER, WITH SPECIAL REFERENCE TO THE CAUSES OF MORTALITY AND OF RECURRENCE OF THE GROWTH. (a)

By CHAS. BARRETT LOCKWOOD, F.R.C.S.,
Assistant Surgeon to St. Bartholomew's Hospital.

SUPRA-PUBIC cystotomy in cases of tumour of the bladder has hitherto been almost the rarest abdominal operation in the practice of general surgeons. Since 1894 I have only performed the operation seven times, with one fatal result. But this statement by itself would give an erroneous idea of the mortality which has attended my operations. I can recall two antecedent ones at the Great Northern Central Hospital which both ended fatally. One of the patients was an old man whose bladder was explored, and found to contain a sloughing epithelioma; he died of pelvic cellulitis. The other was a woman who had two papillomata removed, and afterwards died of shock and suppression of urine. Thus, out of nine operation cases I have lost three. Presently the cause of this high mortality will be discussed, and then it will be seen that it is by no means exceptional for this class of case. The fate of the survivors was far from satisfactory. In the first the carcinoma was so extensive that I could not attempt its removal. In the second the extraction of a quantity of innocent papilloma was followed by suppression of urine and by a dangerous illness. In the third the pelvic lymphatic glands were felt enlarged during the course of the operation. The patient died thirteen weeks after the date of the operation from nephritis. (Operation April 29th, 1897; died August 9th, 1897.) In the fourth a papilloma was removed by forceps and elastic ligature on February 11th, 1899, and a small recurrence was seen with the endoscope on February 6th, 1902. In the fifth the papilloma was small and incrusted with phosphates. It was erased and burnt. Since her recovery she has had a child, and is now quite well, with normal urine. (Since February, 1902; date of operation November 25th, 1899.) Lastly, in the sixth a papilloma was seen with the endoscope at the mouth of the left ureter. When the bladder was opened the growth was found to have hidden an ulcer of the mouth of the ureter. On December 8th, 1900, the growth was removed and the ulcer cauterised. A year afterwards my friend Mr. John Gay told me that, although the patient was better, yet he occasionally had attacks of hæmaturia. Hereafter I propose to refer to these cases, because they throw light upon the cause of the high mortality, and also of recurrence of the growth. In addition, they illustrate points in the methods of operating. Their number is, however, far too small to justify any general conclusions, and therefore I have abstracted the notes of supra-pubic cystotomy in cases of tumour of the bladder from the Clinical Records of St. Bartholomew's Hospital from the year 1891 to 1900 inclusive. During this decade fifty-three operations were performed upon thirty-seven patients. Of these, thirty-two patients had one operation, two had two, two had four, and one had nine.

At the outset I propose to scrutinise the clinical material, to see what light it throws upon the question of mortality. This may be calculated either upon the number of *patients* or upon the number of *operations*. It is obviously of great importance not to confuse the two methods. If we take first the thirty-seven patients upon whom supra-pubic cystotomy was performed for tumour of the bladder, we find that twelve died and twenty-five recovered. Until these figures were seen I thought that the high mortality which had attended my own operations was exceptional. (a)

If we now calculate the mortality upon the total number of *operations* a more favourable result is obtained. Fifty-three operations were followed by twelve deaths and forty-one recoveries. The improvement in results is, of course, due to the recoveries of those patients who had repeated operations performed for the removal of papillomata. One man was operated on for the ninth time, two others for the fourth; and of two patients, who were operated upon twice, both died after the second operation.

In searching for the causes of this high mortality it is simpler to begin with the thirty-two cases in which a single operation was performed. Sixteen of these had the bladder tumour removed in one way or another, and in sixteen the tumour could not be removed. Three of the first class died and seven of the second. In other words, one set of sixteen with removable tumours had a mortality of less than one-fifth, and the other set of sixteen with irremovable tumours had a mortality of nearly one half. Such a striking difference suggests that in the last set some new and deadly complications must have arisen. In the three cases in which the tumour was removed, the cause of death in two of the three was sepsis, the onset of which seems to have been at or after the operation. Of the seven cases which died after one operation and without having the tumour removed, one died of shock and hæmorrhage, three died of sepsis, and three were not examined after death. Of the three septic cases, one died of pelvic cellulitis, one died of suppurative peritonitis, and one of prostatic abscess and pelvic cellulitis.

In one patient who died after a second operation, a year after the removal of the villous tumour the hæmaturia recurred, and was accompanied with rigors and high temperature. The patient died upon the fourth day after the removal of more villous growth, and extensive pelvic peritonitis was discovered. Its existence had not been suspected. The other patient, who had a second operation performed, died of ascending pyelo-nephritis with pyonephrosis. By adding to the three cases in which the tumour was removed six more in which it was not, we have nine cases in which the cause of death is known. Seven died of sepsis, one of shock, and one of shock and hæmorrhage. Clearly sepsis is the great danger of supra-pubic cystotomy in cases of tumour of the bladder; and after sepsis come shock and hæmorrhage, but they come a long way after.

(a) Read before the Royal Medical and Chirurgical Society, ovember 11th, 1902.

(a) Such, however, is clearly not the case. Sir Henry Thompson, operatng upon very severe cases by the perinæal route, had six deaths in twenty patients. "Tumours of the Bladder," 1884, p. 98, *et se*

I will now try to inquire how the sepsis occurs, and why it is so fatal. The alternatives are, first, that the sepsis may be present in the genito-urinary tract at the time of the operation; second, it may be introduced during the operation; and, third, it may enter after the operation. Unfortunately the clinical notes give no precise information upon these three alternatives; but, as a rule, they state whether the urine was acid or alkaline before the operation; whether cystitis had begun; whether the urine was mixed with pus or muco-pus; or the time when it became alkaline. It is well known that various kinds of bacteria may be present in the genito-urinary tract, although the urine which is passed is acid. But in the class of case under consideration, although it is not safe to infer that acid urine betokens asepsis, nevertheless we may assume that pus, muco pus, and alkalinity indicate sepsis.

If now we take again the patients who underwent one operation, and again divide them according to the removability or irremovability of the tumour, the results are as follows:—The condition of the urine is known in fourteen of the sixteen who had the tumour removed. In twelve the urine was acid, in two it was septic, but not in a high degree. Three of the twelve patients with acid urine died. I have already said that one died of shock, one of profuse and rapid hæmorrhage followed by pelvic cellulitis; and one of pyæmia following upon pelvic suppuration and ascending pyelo-nephritis. The two patients with septic urine both recovered. They were females, and, as it happened, were both under my own care. One had very slight sepsis, her papillomata being covered with a thin and recent deposit of phosphates. The other had an ulcerated and pedunculated epithelioma with a circumference of eleven inches. The sepsis was considerable, but I made determined efforts to disinfect the bladder. The condition of the urine was noted in thirteen of the sixteen patients with irremovable tumours. Three had acid urine and ten alkaline. A man with an irremovable ulcerated epithelioma had acid urine, but it contained pus and blood. He recovered from the operation, and all his urinary symptoms remained in abeyance for several months. A second patient with acid urine died of shock and hæmorrhage. The urine of the third patient was faintly acid before the operation. Death ensued from diarrhœa and hæmaturia. At the post-mortem examination suppuration was discovered in the psoas and iliacus muscles and in the pelvis, and the peritoneum was inflamed.

The remaining ten patients with irremovable tumours all had septic urine, and five of them died. As no post-mortem examination was made in two out of the five the cause of their death is unknown. Of the other three it is known that one died of suppurative peritonitis, one of cystitis, and one of extravasation of septic urine.

It may be remembered that two patients died after a second operation. One was septic before the second operation, and died of ascending pyelo-nephritis. The other had septic urine at the time of the second operation, and died of purulent peritonitis.

I shall not try to generalise from such a small number of cases; nevertheless I venture to point out one or two obvious conclusions. And, first, how much safer the operation of supra-pubic cystotomy is when the urine is acid and the tumour removable. Indeed, it seems reasonable to suppose that if shock and hæmorrhage could be prevented—and I believe that they could—the mortality would fall within very reasonable proportions.

Second, the cases clearly show the extreme danger of supra-pubic cystotomy when the urine is septic and the tumour irremovable. I have come to the conclusion that an operation is not justifiable under such circumstances. It is true that now and then a survivor experiences some relief from the horrors of the disease, but that relief is not worth attempting when the attempt entails a mortality of 50 per cent. Irremovable tumours of the bladder are almost invariably malignant. This was the case with fifteen out of sixteen under discussion, and it is almost certain that the sixteenth was also malignant. Now the ordinary course of malignant disease on any surface of the body is growth, degeneration and sepsis. In tumours of the bladder the growth is almost invariably accompanied by hæmorrhage, which may be fatal, but in any case predisposes to septic cystitis, and, indeed, to general sepsis. Further, the sepsis which complicates malignant disease is of a virulent type. Surgeons are well aware of its dangers. The only operation case I can remember to have lost from septicæmia had a foul and ulcerated carcinoma of the breast. While operating upon malignant disease complicated by sepsis the freshly cut tissues are sure to be infected, and the infection easily enters the blood-stream. I do not believe that the sepsis which complicates malignant disease of the bladder is more virulent than that met with in malignant disease of other regions, but, owing to the proximity of the ureters and kidneys, of the pelvic veins and cellular tissue, and of the peritoneum, it has unusual opportunities of doing harm.

Unfortunately, by far the largest proportion of bladder tumours are malignant. I have collated fifty-eight cases from the clinical records of St. Bartholomew's Hospital from the year 1891 to 1900 inclusive.

The diagnosis is based on information obtained by post-mortem examination, supra-pubic cystotomy, urethral dilatation, or clinical examination disclosing a growth in the bladder and secondary growths elsewhere. In many instances the macroscopic was confirmed by microscopic examination. Thirty-six of the fifty-eight cases were malignant, and in four of these the growth also involved the prostate. Eight were doubtful, but more likely malignant than innocent. Fourteen were supposed to be innocent. Three of the latter were discovered accidentally at post-mortem examinations. Two out of the three died from the effects of accidents, and one of cancer of the œsophagus. This gives a proportion of about four malignant or doubtful to one innocent tumour. But it is possible that these statistics are too favourable. Albarran (a) examined eighty-eight tumours of the bladder with the microscope, and found that seventy-one of them were malignant and seventeen were innocent, a proportion of about five malignant to one innocent.

The discrepancy is probably capable of simple explanation. I think we may assume that a good many tumours with thin pedicles have been thought innocent, especially in the absence of a microscopical examination. But it is now known that the thickness of the pedicle is not a trustworthy guide to the characters of the growth. Perhaps the slender-stalked villous papillomata may be an exception, but even they are at times associated with malignant growth. The extreme frequency of malignancy in tumours of the bladder, and the fallacy which underlies the naked-eye appearances, have an important bearing upon the methods of treatment.

The high mortality which attends supra-pubic cystotomy in cases of tumour of the bladder can be greatly lessened. In my own small experience it has been mainly due to the violation of the general principles of surgery. It is now almost certain that two of my fatal cases ought not to have been attempted. In one a huge irremovable malignant growth was found, and it was complicated with sepsis. Now surgeons will agree that if a malignant growth cannot be entirely removed it ought to be left alone. Nothing can be more unsurgical than to perform an incomplete, futile operation, and at the same time expose the loose cellular tissue and veins of the pelvis and the peritoneum to a virulent form of sepsis. In the second case the growth, although apparently innocent, was of at least twelve years' duration, filled the bladder, and was complicated with sepsis. The patient never rallied, and died on the third day. It is probable that he had arrived at the stage of ascending pyelo-nephritis. My third fatality was due to shock.

(a) "Les Tumeurs de la Vessie," Paris, 1892, p. 165.

Clearly, the proper time for operation is (1) before the growth is too extensive for removal and (2) before sepsis is established. Both of these requirements are fulfilled by an early diagnosis. This can in nearly every case be achieved. The growth would be seen if the bladder endoscope was systematically used after the occurrence of sudden spontaneous hæmaturia. Hæmaturia is the commonest and earliest symptom of bladder tumour. It was present in forty-three out of forty-five cases. In the two in which it was supposed to be absent the urine was not examined with the microscope. In about one quarter of the forty-three cases the blood was accompanied with pain. In about three-quarters the hæmaturia was preceded, accompanied, or followed by other symptoms, such as pain during and at the end of micturition, pain in the back, abdomen, rectum, vagina, root or end of penis, pubes, rectum, perinæum, and neck of bladder. Sometimes the hæmaturia was preceded by increased frequency of micturition, and sometimes was followed by retention or incontinence. Bits of growth were occasionally passed, or the urine contained suspicious epithelial cells. Unfortunately the first attack of hæmaturia soon subsides, and may not recur for months or even years, and the patient is supposed to have recovered. The absence of pain affords a false sense of security, and is an additional cause of delay in using the endoscope.

Although my own experience is so small, perhaps I may be allowed to refer very briefly to the details of the operation. In the first place, each step in the removal of the growth ought to be guided by the clearest vision, and for this a full-sized supra-pubic opening is required, aided by efficient retraction of the edges of the wound and by the use of an electric forehead lamp. Next as regards the removal of the tumour. Of late years a great deal of evidence has been accumulated, especially from the results of accidental wounds during laparotomies, or accidental rupture of the bladder, to prove that wounds of the bladder unite well and speedily provided that the operation is performed under aseptic conditions. The ideal of operation of supra-pubic cystotomy for the removal of tumour from the bladder ought in my opinion to fulfil the following conditions:—First, an early endoscopic diagnosis. Second, asepsis before, during, and after the operation. Third, the excision of the tumour, together with its base and a safety margin of healthy tissue. (*a*) Fourth, the closure of the wound left by the excision. Fifth, the closure of the supra-pubic wound. I have not endeavoured to discuss many important details; such, for instance, as the best suture material, or the conditions under which drainage is necessary above the pubes rather than by the urethra. In all regions of the body I am accustomed, when sepsis is present, to use biniodide of mercury catgut, and to provide abundant drainage. In addition, it is probable that fine catgut is the best material for all ligatures and sutures, except those in the abdominal wound, and also those which close the bladder.

Finally, I am convinced that, if the above five conditions were fulfilled, supra-pubic cystotomy for the removal of tumours would rapidly take its place in the same rank with the other successful abdominal operations, such as cholecystotomy or ovariotomy.

The King's Hospital Fund.

THE General Council, at their meeting on Monday, decided to distribute among the hospitals this year a sum of £100,000, or double the amount of last year's grants. It was determined that it should be devoted to the following four principal objects:—The opening of closed beds. The wiping out or diminution of debt. The carrying out of improvements by building or otherwise. The supply of various special needs and increased aids to general maintenance.

UTERINE MONOMA

(SOFT ŒDEMATOUS "MYOMA" OF LAWSON TAIT), COMPLICATED WITH THREE MYOMATA OF THE ORDINARY TYPE. (*a*)

By HERBERT SNOW, M.D. Lond., &c.,

Senior Surgeon, Cancer Hospital.

I INVITE the attention of the Society to a specimen which, if not unique, at any rate shows an extremely rare condition, and I doubt if anything similar has been previously exhibited here.

It will be remembered that Lawson Tait strenuously insisted upon the fundamental distinction between the solitary uterine tumour, which he designated "soft œdematous myoma," and for which I have lately ventured to propose the more convenient term "monoma," and the common uterine fibroid, or fibro-myoma. He pointed out that the monoma was always solitary; was always steadily progressive towards death, which it caused within a short term of years; was accompanied by severe and continuous hæmorrhage; was more painful, and attended by relatively acute symptoms. On the other hand, the much more prevalent uterine myoma is always multiple, need not involve any symptoms whatever, slowly grows throughout a very prolonged period, is never fatal except indirectly, as by bulk or degenerative phenomena. There is thus a wide gulf, clinical and pathological, between the two varieties.

In the specimen before you both forms of tumour are found to coexist. We have a round, softish, central mass as large as the fœtal head, giving rise to obscure fluctuation, which indeed was so marked that a colleague who assisted me at the operation urged me, after the abdomen had been opened, to insert a trocar before proceeding further. When I first saw the case in the out-patient room, I regarded it as an ovarian cyst complicated with fibroids; though as soon as the patient was anæsthetised I had no difficulty in diagnosing a solid growth. Then, with this you see multiple myomata of the ordinary pattern, solid and firmly organised.

The texture of the large monoma is soft, very vascular, and embyronic. The finger can readily be pushed into the soft pulpy tissue. At each corner of the fundus is a hard, tough myoma of the size of a small orange, sessile and interstitial. Behind one of these is another, smaller, attached to a thin pedicle.

The microscope shows the monoma to consist of non-striped muscle-fibre, with large nuclei, and very numerous leucocytes; to be, in short, much more embryonic in structure than the ordinary myoma, and to be passing into myo-sarcoma.

Case.—Emma F., æt. 42, married, four children (had had a miscarriage), admitted into the Cancer Hospital, August 23rd, 1902. A ruddy, robust-looking country-woman, wife of a miller. Previous good health: last child born thirteen years previously. No family history.

The symptoms were of four years' duration. For a long time there had been almost incessant vaginal hæmorrhage, so the patient stated, though there was nothing in her aspect to show this. Severe aching lumbar and abdominal pains, worse at the periods, and with movement. A huge irregularly shaped mass distended the abdomen. Some of the tumours were hard, but one appeared to fluctuate. They were mobile and slightly tender on pressure. The growth was rapidly increasing in bulk.

On incision, there were no adhesions, but the

(*a*) Obviously this proviso is difficult to fulfil when growth is at the orifice of the ureter, but even there, I believe, we might proceed boldly provided the cause is not a septic one. Also it cannot be fulfilled in cases of general villous papillomata.

(*a*) Read before the British Gynæcological Society, November 13th, 1902.

veins of the broad ligament on each side were enormously distended, and all the tissues highly vascular. The mass was dissected out from the cervix by the flap-operation, the flaps being subsequently sutured. It was necessarily prolonged, in view of the vascularity, as well as of the fact that the growth was deeply lodged in the pelvic cavity, and could be only partially delivered. The abdominal wall was closed in two layers, after a pint of saline fluid had been poured into the cavity. The next day the house-surgeon found an excessively frequent pulse, and injected a pint of saline fluid into the rectum with much benefit. Recovery was subsequently uninterrupted. The patient was discharged well on October 11th.

UNREDUCED SUBCLAVICULAR
DISLOCATION OF THE
HEAD OF THE HUMERUS.(a)

By EDWARD H. BENNETT, M.D., F.R.C.S.I.,
Professor of Surgery in the University of Dublin; Surgeon to Sir Patrick Dun's Hospital, Dublin.

The specimen which I submit to the Academy is a dissection of a shoulder-joint deformed by old unreduced dislocation of the head of the humerus, and with it a cast of the limb taken before its dissection. Of the life-history of the case I know nothing, and speculations as to the reason for its having escaped reduction are useless. The body is that of an aged female A view of the specimen and of the cast make it evident that the dislocation is to be named "subclavicular." The upper extremity of the humerus is seen to be placed directly beneath the clavicle, and to be remote alike from the glenoid cavity of the scapula and the coracoid process. The cast shows also a feature of the deformity of the limb characteristic of subclavicular dislocation, as contrasted with the intra-coracoid and other forms of antero-internal dislocations.

The limb lies in contact with the side of the thorax; to use the description of Malgaigne, "the arm is generally glued against the trunk." We can, in the cast, see this attitude of the limb, and the bearing of the tumour formed by the head of the bone. Looking at these relations of the parts chiefly involved in the dislocation, one is forced to the conclusion that when the dislocation occurred the whole, or nearly the whole, of the capsular ligament of the shoulder was ruptured, or stripped from its attachment to the bone around the glenoid portion of the scapula, necessarily most completely on the outer side of the joint.

The specimen shows that the head of the humerus passed into the bottom of the sub-scapular fossa, pushing before it, and to the inside, the sub-scapular muscle, which, with its tendon, is entire. Before the dissection had disclosed these parts, it was only evident that the dislocated head of the humerus could not be felt in the axilla, nor probably through its wall. The long head of the biceps muscle was torn by the dislocated humerus, and is adherent to the bicipital groove. I obtained this specimen in July, 1900, and it lay by me undissected for a time. In the spring and summer of 1899 I met two cases of dislocation in the living, which agreed in all particulars with it, so far as one can trace the similarity between the living and the dissected specimen. I should say that before 1881 I had been well experienced in the reduction of shoulder dislocation by the method of the heel in the axilla. I knew that to succeed by that method in difficult cases it was necessary to bring the heel, carried into the armpit, into contact with the displaced head of the humerus, and to use it as a fulcrum on which to lever the dislocated bone into its place. I may now mention that in attempting this movement I could not reach the head of the bone in either of the cases I am recording, nor, indeed, could I pass the heel at all upwards into the armpit. The arm glued to the side absolutely prevented this.

After I had heard Kocher, at the International Congress in 1881, describe his method of manipulation in treatment of shoulder dislocations, I applied it here with invariable success in reducible antero-internal dislocations, until I met the two cases I now submit. I did not, of course, apply it to posterior dislocations, for which it is manifestly unsuitable, of which I met in the time two cases.

The first of the cases I would now record was that of a powerful man, over six feet in height—a gentleman constantly engaged in active country life. He was mounted on a young horse, going to a meet, when someone handed him a paper. To read this he let his reins loose on the horse's neck, and as he read, the wind fluttered the paper, and the horse made a sudden plunge, throwing his rider heavily on the shoulder. Being near surgical help, he almost at once was placed under treatment by a very able and experienced surgeon, who got to help him three or four of the Royal Irish Constabulary, whose barracks were at hand. The attempt failed, and the patient telegraphed to me to meet him at one of the private hospitals that evening. I found that the dislocated limb presented the feature of an arm glued to the side, and that I could not reach the humeral head in the axilla with my fingers, while the tumour beneath the clavicle was distinct, though masked by powerful muscles. I tried the movements of Kocher's method, and failed. I determined, as the patient had had a bad few hours with his fall, the attempt at reduction tried in force, and his railway journey, to let him rest that night, and be ready in the morning to take an anæsthetic, when I could have with me sufficient assistance. In the morning I found that Kocher's movements again failed, and the failure was repeated when ether was fully given. I then tried the heel in the axilla, but, do my best, I could not reach the head of the bone, nor could I by traction bring it down to meet my heel. I then changed the method, making traction, against efficient counter-extension, on the arm abducted downwards and outwards, with lacs fast to the wrist and above the elbow-joint; by alternate rotation back and forwards. While I kept up the strain on the limb, I made it move with what is best described as a screwing movement, which in a few minutes ended in complete reduction.

The next case is of the same kind. The patient was a man over six feet in height, who had, in his youth, been a great athlete; he is now past middle life. I approached the case with misgivings. Already five weeks had elapsed since the occurrence of the injury—a heavy fall on the shoulder; and already five attempts had been made at reduction under anæsthesia, with four or five surgeons present each time, without any signs of reduction appearing. The features of the injury were the same as I have just now put before you—a tumour under the clavicle well to the inside of the coracoid process, an arm glued to the side, and the axilla closed by the shaft of the humerus, which prevented the hand or the heel from reaching the head of the bone. When I had the patient fully under ether, I tried Kocher's movements, without result, except that probably the head of the humerus was somewhat freed from adhesions. I tried the heel in the axilla, as in the last case, and because I had been so familiar with the method. I could not enter the axilla at all with my heel. I then tried the extension of the arm extended downwards and backwards. I found on making the screwing movements, as before, that the head of the bone came down, and was slowly reduced into the joint. I confess that the result astonished me. I believe that the head of the humerus could not get inwards to the distance at which it lies in the specimen without a great rupture of the capsule, first on the inside of the joint, through which the bone escapes and passes beneath the sub-scapularis, and again by the tearing away of the outside of the structure to permit the bone to take its new position. We see in this dislocation that the bone passes right away from the glenoid process of the scapula. In the other antero-internal dislocations the humerus rests by its groove between the head and great tuberosity on the glenoid border. The varieties of these lesions depend on the height or lowness of the contact between the bones in this groove and on the degree of rotation enforced on the shaft of the bone by the extent of untorn capsular ligament.

(a) Read before the Section of Pathology in the Royal Academy of Medicine in Ireland, on Friday, November 7th, 1902.

Looking at a model in which the parts of the ligaments are taken by elastic cord and membrane, we can see the reason why Kocher's proceeding fails, there being no structure left to act in maintaining the tension between the glenoid border and the humeral groove. Farabeuf's experiments demonstrate this point also, for if the external parts of the capsule be divided, the leverage necessary to the production of Kocher's reduction fails.

Austrian Clinical Lectures.

THE TREATMENT OF ARTERIO-SCLEROSIS BY SUBCUTANEOUS INJECTIONS OF ORGANIC SERUM.

By Dr. TRUNECEK,
of Prague.

[*Specially translated for* The Medical Press and Circular.]

Among the salts of the alkaline metals and earths which enter into the composition of blood serum, of which sodium chloride is the chief constituent (70 per cent.), there exists a certain proportion of phosphate of lime. This compound is insoluble in distilled water, but, on the contrary, dissolves easily in salt water, and also in solutions of sodium and magnesium phosphate, salts of which ordinary serum contain very small quantities (0 gr. 15 centigr. of one, and 0 gr. 48 centigr. of the other per cent.). We may assume, therefore, that it is to the presence of sodium chloride and in part to that of the alkaline phosphates, that phosphate of lime is found in a state of solution in blood serum. We may add, with regard to the sodium chloride, that all the tissues of the organism embody a rather large quantity thereof, but according to Bunge, this salt, at any rate, in the mammifera, is the more abundant the younger the animal.

These facts of biological chemistry, which we have deemed it desirable to mention, serve as a basis for the establishment of a rational treatment of certain pathological states—and more particularly of arterio-sclerosis—a condition directly associated with the deposit of phosphate of lime in the vascular walls. I must admit that it is impossible to prove conclusively that this precipitation is due to a deficiency of sodium chloride in the juices of the organism; but this, perhaps, we may take for granted, if we remember that the affection generally occurs in elderly subjects—that is to say, in persons whose organisms are comparatively poor in sodium chloride, whose urine is strongly acid, a sure sign of an insufficient quantity of alkaline salts in the blood. It seems natural enough, then, that in the therapeusis of this morbid state we should first of all endeavour to remedy this insufficiency.

To attain this end, the mere exhibition of chloride of sodium is not always sufficient, since it does not modify the alkalinity of the blood, which is very often reduced in these affections. The other salts of the serum which are equally endowed with an alkaline reaction (*e.g.*, sodium carbonate) are not any more likely to bring about the required change, even when taken in doses that render the urine alkaline. We must therefore have recourse to both chloride and carbonate of sodium; but the latter salt cannot be introduced through the stomach, the free hydrochloric acid of the gastric juice changing it into chloride. We are therefore constrained to administer it either by subcutaneous or intra-venous injections.

Lastly, it is essential that the substances thus administered should be quite harmless in their effect on the organism. In order to realise this desideratum, I tried all the alkaline salts which normally constitute the inorganic portion of blood serum. I prepared a mixture in which their respective proportions were the same as in the serum; I then made a solution six times as strong as the physiological fluid. To this solution, of which the formula is as follows, I have given the name of "inorganic serum":—

Sulphate of sodium	0 gr.	14 centigr.
Chloride of sodium	4 „	92 „
Phosphate of sodium... ...	0 „	15 „
Carbonate of sodium	0 „	21 „
Sulphate of potassium ...	0 „	40 „
Distilled water	Q.S. for 100 grammes.	

It is a clear, transparent liquid, with a saline taste and alkaline reaction; the saline constituents are 6·12 per cent., its specific gravity (at 20° C.) is 1·04. When it is injected into the circulation, in healthy subjects, the salts which it contains are rapidly diffused through the tissues and eliminated by the kidneys. In order, therefore, to render this absorption slower, I had recourse to subcutaneous injections, which I made as a rule in the forearm. These injections are well borne, and locally, they only give rise to an insignificant amount of pain which soon subsides.

I should have been glad to have been able to relate some instances of patients treated by this method. Unfortunately in the case of arterial sclerosis, there is no constant objective sign which enables us to demonstrate the existence of this affection. Pronounced changes in the aorta and large vessels may exist without any perceptible induration of the superficial arteries, and without any tangible hypertrophy of the left ventricle; moreover, it is by the alleviation of the subjective disturbances, especially of cardiac asthma, that are manifested the good effects of a treatment directed against arterio-sclerosis. Allow me, for this reason, to relate, first of all, the following case, in which the improvement was rendered manifest by physical signs which afforded conclusive evidence thereof.

In April, 1900, I was consulted by a man, æt. 44, big and well built, but cachectic. A year previously he had suffered from pain in the right arm, which, five months later, began to waste, together with loss of muscular strength. At the same time, a pulsating tumour made its appearance just above the right clavicle. This was diagnosed to be an aneurysm of the sub-clavicular artery, for which ligature was proposed, but the patient refused any operation. Little by little the symptoms became more marked, the dyspnœa and palpitation grew so intense that walking became almost impossible. When I saw the patient, in addition to the symptoms of arterio-sclerosis of the superficial arteries and hypertrophy of the left ventricle, I noted the existence, on a level with the second rib on the right side, and on the parasternal line, of a pulsation visible to the eye, synchronous with the cardiac systole; similar pulsations were visible in the sub-clavicular fossæ of the same side. Furthermore, just above the internal third of the right clavicle there was a pulsating tumour the size and shape of a chestnut, which also pulsated synchronously with the beating of the heart. Its lower part disappeared behind the clavicle. The right limb was weakened and slightly reduced in size; the atrophy affected more particularly the thenar eminence; the flexors of the fingers were paretic, the terminal phalanges were clubbed, and there was desquamation of the epidermis over the arms and trunk.

In the presence of these symptoms I diagnosed the case as one of aneurysm or dilatation of the ascending aorta, and aneurysm of the right sub-clavicular artery, accompanied by compression of the brachial plexus and the carotid artery of the same side, and I prescribed iodides. But this treatment, at the end of three weeks, having no effect, I decided, on May 9th, to make a first injection of a third of a cubic centimetre of inorganic serum, without, however, discontinuing the administration of sodium iodide. I repeated the injection ten days later, increasing the dose to 1 c.c. A few hours later the patient stated that the dyspnœa and distressful sensations over the heart, particularly the pulsations, had disappeared; but this improvement was not corroborated by any objective sign. The injections having been well borne, I repeated them thenceforward, every four or five days, increasing the quantity each time of liquid injected by a fifth of a cubic centimetre. At the sixth injection the pulsations felt in the second intercostal space had very much diminished in intensity; at the end of seven weeks, when the patient had received, altogether, 12 c.c. of inorganic serum, they had completely ceased, and they have not reappeared since.

The treatment was persevered with. In September the size of the sub-clavicular tumour had considerably diminished, while the paretic phenomena in the right arm had improved. Little by little the general condition also improved, and all the bodily functions were discharged normally. From the beginning of November, the total amount injected being then 120 c.c., the epidermic desquamation ceased and has not since reappeared. Up to the present his general condition has continued in a very satisfactory state, in spite of an intercurrent attack of influenza, and in spite of the fact that no injections have been made for more than three months. Locally, the sub-clavicular tumour still exists, but you will see by the two diagrams which I hand round that its dimensions have been considerably reduced; a slight pulsation is perceptible in the sub-clavicular fossa: the pulsations over the second side have completely disappeared; and, lastly, the thenar eminence is still atrophied. Altogether the patient has received 190 c.c. of inorganic serum in fifty injections.

I could mention many similar instances of the efficacy of this treatment of manifestations of arterio-sclerosis. The same result was obtained in the case of an old man, æt. 74, suffering from arterio-sclerosis and hypertrophy of the left heart, in whom the dyspnœa underwent marked improvement from the commencement of the treatment. Unfortunately I was only able to make three injections. A similar result was obtained in the case of a woman, æt. 33, suffering from arterio-sclerosis and anæmia; the dyspnœa disappeared completely and permanently after the patient had received 5 c.c. of inorganic serum.

I treated in the same way an individual, æt. 59, an alcoholic subject, who, five years previously, had had an attack of apoplexy. The disturbance consequent upon this had diminished to such a degree that walking had once more become possible, when, in August, 1900, tumefaction of the left foot and knee took place, against which all treatment proved vain. The patient was compelled to keep his bed, and his condition became steadily worse. It was in November, 1900, that he came under my care. He was in a very pronounced state of cachexia; the arterio-sclerosis was accompanied by hypertrophy of the left ventricle; there was purulent arthritis of the left foot and ankylosis of the left knee. The epidermis all over the body was desquamating freely. The urine was strongly acid, and contained uric acid in excess; the patient ate very little and was unable to sleep.

I started the treatment in the middle of December. After the second injection the man was enabled to sleep; at the end of two months, after having received 16 c.c. of serum, he had recovered his appetite and his general condition had improved. The diseased foot and knee had very much diminished in size; later on all the fistulæ of the foot closed, and this without any kind of local treatment; lastly, the proportion of urates and the urinary phosphates markedly increased. At the present time the total quantity of serum injected amounts to 58 c.c.; the patient, who had been unable for eighteen months to leave his bed, begins to walk about; the desquamation of the epidermis is still appreciable, but is diminishing; and the knee and foot have almost returned to their normal size.

The following is the manner in which I apply the treatment: I generally start by a dose of 1 c.c., then I repeat the injections every four or seven days, increasing on each occasion the quantity of serum by about 0 c.c. 20, and, when I intend to inject more than 1 c.c., I make several small injections to avoid too great a distension of the skin; I first of all inject 0 c.c. 5 or 1 c.c., then, leaving the needle in position, I wait several minutes before repeating the injection. When the dyspnœa is particularly distressing I do not hesitate, in order to afford relief, to repeat the injection every day. Up to the present the largest quantity I have injected at any one time is 7·5 c.c. Usually it is unnecessary to exceed 5 c.c. Even these large doses are well borne. The painful swelling which follows the injection soon disappears, and in no case did any abscess or acute inflammatory phenomena follow.

With reference to the effects of this treatment this method specially acts on the dyspnœa, which is sometimes calmed by the injection of mineral serum even more so than by the subcutaneous injection of morphine; as a rule the cardiac asthma is also improved, sleep and appetite return, and the general condition improves. In regard to the symptoms of arterio-sclerosis, if it is true that they appear to retrogress in certain cases, but we must not measure the success of the treatment by its effects in this direction but rather by the changes brought about in the general condition.

This therapeutical method appears to be indicated in persons suffering from arterio-sclerosis, whose blood is impoverished in alkaline salts. This does not signify that the alkalinity of the blood is reduced; as a matter of fact the proportion of chloride of sodium may be greatly below normal without any change in the reaction of litmus paper as evidenced by hyperacidity of the urine. On the other hand, a neutral or alkaline reaction of the urine—which is rarely observed in persons suffering from arterio-sclerosis—constitutes a contra-indication of the use of the inorganic serum. To sum up, the degree of the urinary acidity—as well as the desquamation of the integument—will be the chief signs on which we must rely, to commence, suspend or recommence the treatment.

It now remains for me briefly to explain the mode of action of injections of mineral serum. I have already explained the influence which alkaline salts exert in respect of the solubility of phosphate of lime which encrusts the vascular walls of persons suffering from arterio-sclerosis. This chemical action is also exerted on the fibres of the myocardium, the nutrition whereof, under the influence of the inorganic serum, is rendered easier, while their contractility and elasticity are increased, hence the regulating effect on the cardiac function.

One of the symptoms which soonest yields to the injections in question is dyspnœa. This fact may be explained by the increase in the alkalinity of the blood. As a matter of fact, we know that many oxydations cannot take place except in an alkaline medium, or are, at any rate, facilitated by such a medium. In addition to this the property possessed by blood plasma of absorbing the carbonic acid arising from organic combustion is also enhanced by the alkalinity of the blood. Now, it is well known that free carbonic acid, by its special action on the respiratory centre of the medulla, is the immediate cause of the dyspnœa, and this is withdrawn when the gas is converted into a salt.

This same excess of free carbonic acid (and other acid products of decomposition) provokes in the tissues a state of fatigue, which manifests itself in muscular tissues by a loss of contractility, and in the elastic tissue by a loss of elasticity. It is doubtless due to a similar change in the patient, whose history I have just been relating, that there occurred a dilatation of the arch of the aorta, the walls of which are, as we know, principally composed of elastic tissue; this also explains the decrease in size of the tumour under the influence of mineral injections.

Moreover, the good effects of this treatment may be attributed on one hand to the direct action of salts of sodium, and particularly of the chloride, on the heart. Potassium also acts on this organ, but as an antagonist of sodium. We must always bear in mind that the toxicity of the salts of sodium is about twenty times less than that of potassium; now it is exactly in the proportion of twenty to one that the salts of sodium and potassium exist in the blood serum, and consequently in the serum I employ.

Lastly, the cases related above show that the salts of alkaline metals in excess in the blood, especially chloride and carbonate of soda, have a favourable influence on the formation of normal epithelial tissue—we are also justified in hoping that, in a similar manner, the injections of inorganic serum may assist in the regeneration of the vascular endothelium, which has undergone changes during the evolution of the arterio-sclerosis.

In conclusion, I think I may state that the method which I have recommended, by raising the proportions of the alkaline salts in the blood and by increasing the alkalinity of this liquid, renders soluble the phosphate of lime which has been deposited upon the arterial walls, increases the activity of organic combustion, restores the intercellular exchange to approximately their normal standard, and consequently regulates the functions of the various systems, especially those of the heart and the blood vessels.

Clinical Records.

CHOLEDOCHOTOMY FOR CHRONIC JAUNDICE WITH CHOLANGETIS. (a)

By Mr. Alban Doran, F.R.C.S.,

Surgeon to the Samaritan Free Hospital, &c.

The patient had suffered from four or five attacks of jaundice when a child. When 33 years of age she had an attack of pain, and for the first time passed gall-stones. For two years the patient continued to pass about one stone per month without any jaundice, but with considerable pain.

On April 23rd, 1902, the patient, then æt. 36, came under Mr. Doran's care in the Samaritan Hospital. She was jaundiced, and the gall-bladder was enlarged and hard. The motions were quite pale, with a remarkable quantity of powdery matter, which proved to be of vegetable structure.

On May 1st an operation was performed. An incision was made, the gall-bladder was aspirated, and an ounce of thick greenish pus came away. The common duct was found much dilated, and just above the duodenal orifice a stone was impacted. A vertical incision was made into the dilated duct, and a rough, spherical calculus, three quarters of an inch in diameter removed. With the probe no other calculi could be found. The duct was sutured, a drainage tube placed in the gall-bladder, a plug of gauze passed under it and pressed against the common duct, and the upper part of the abdominal wound was closed.

On the third day after the operation, two soft calculi came away. On the fifth day there was severe vomiting, a rise of temperature and a pulse-rate of 140. On the sixth day much deep yellow bile escaped from the wound, and the vomiting ceased entirely. At the end of three weeks the patient was convalescent.

Two months after the operation there was some suppuration, and a piece of ligature came away. During September three pieces of calculus came away from the fistula, which is now only two and a-quarter inches in length.

Remarks.—This case showed the value of choledochotomy, an operation first performed by Courvoisier thirteen years ago. Choledochotomy was an ideal operation. A sand-bag under the loins proved a great assistance in pushing the duct forward. A long incision should always be used. The gall-stones which came away after the operation were probably hidden in the gall-bladder. The acute attack on the fifth day was probably a relapse of the cholangetis. The vomiting was extremely severe, but without symptoms of septic peritonitis. A fistula connected with the common duct, which fortunately did not occur in this case, was much more serious than one into the gall-bladder. There ought, however, to be no difficulty in suturing when the patient is placed in the proper position. Mr. Doran asked for opinions on the value of calcium chloride for increasing the coagulability of the blood. He thought the passage of quantities of sand-like powder of some interest. He also called attention to the fact that pregnancy favours cholelithiasis.

FRENCH HOSPITAL AND DISPENSARY.

Ectopic Pregnancy in left Broad Ligament with Secondary Rupture into Peritoneal Cavity necessitating Operation. (a)

Under the care of Mr. R. O'Callaghan.

The patient, æt. 33, was admitted to the French Hospital on October 20th, suffering from abdominal pain.

Condition on Admission:—The patient complained of great pain in the lower part of the abdomen, which had been present for a month before admission. She said she had always been regular, but had lost very little the last two periods, and that she was perfectly well until a month before admission, when she was suddenly taken ill with violent pain in the abdomen after having been out for a walk. A doctor was at once sent for, who diagnosed a ruptured ectopic gestation.

On Examination:—A large solid tumour was discovered, round and smooth except on the left side, where a lump about the size of a large orange could be felt. This tumour presented the appearance of a uterus three months pregnant. There was great tenderness on palpation, especially on the left side. On examining the breasts, the primary areola could be clearly distinguished and milk also squeezed from the breasts. Per vaginam, there was a bulging down of the left fornix of the vagina, and this bulging was found to be continuous with the tumour felt in the abdomen. The patient was very constipated, and the bowels were opened by means of enemata.

(a) Read before West London Medico-Chirurgical Society, November 7th, 1902.

(a) Read before the British Gynæcological Society, November 13th, 1902.

Course of the case.—After the administration of enemata the lump which was found on the left side of the tumour disappeared, showing that it was most probably caused by an accumulation of fæces. The patient continued to complain of great pain in the abdomen, and on October 28th there had been no passage of fæces or flatus for twenty-four hours. The pulse ran up to 142 per minute and the temperature to 102°. The patient became blanched and the respirations quickened and sighing in character. Vomiting also set in. A diagnosis of intestinal obstruction was made, and when I arrived at the hospital the woman was very ill, but ready for operation. On opening the abdomen below the umbilicus, the first thing found was fresh arterial hæmorrhage, the tumour then presented with the left tube on top of it dark in colour and congested.

The tumour proved to be an extra-peritoneal hæmatocele in the left broad ligament, which had moved over to the middle line, pushing over the uterus. The broad ligament was opened up at the point of secondary rupture. The blood-clot (about two pints in all) was removed, and the gestation discovered in the middle of it; this was somewhat of the shape of an acorn-cup about the size of a walnut, with rough jagged edges, where it had ruptured. The placenta was easily peeled off its attachment inside the broad ligament. The cause of the intestinal obstruction was the pressure of the blood-clot on the intestine which completely blocked the rectum.

A peculiar feature of the case was the presence of a coil of small intestine tightly glued to the fundus of the uterus by an apparently congenital band resembling a mesentery, with the absence of any appendage on the right side.

The abdominal cavity was well washed out with very hot water, temperature 112°, until the fluid came away perfectly clear. The edge of the broad ligament was then sutured to the abdominal wound, and the whole cavity plugged with cyanide gauze; the abdominal incision then closed up. The plugging was removed in forty-eight hours, after which some slightly blood-stained fluid came away. The patient has made an uninterrupted recovery, the wound having healed firmly.

Remarks.—This was a case of primary rupture into the broad ligament, attended by such a large amount of hæmorrhage as to cause complete obstruction of the bowel. The interference (enemata, &c.) necessary to relieve this obstruction, together with the vomiting, which became stercoraceous, caused rupture of the broad ligament, with fresh hæmorrhage into peritoneal cavity, and active operative measures were required to save the patient's life.

Cases of extra-peritoneal hæmatocele rarely reach this state of tension, and generally cure themselves by absorption in time; but on page 32 of Tait's "Lectures on Ectopic Pregnancy" I find he describes a very singular case. In connection with this I should like to mention the pleasure I received in reading Dr. Cullingworth's Bradshaw Lecture, in which he gives credit to Lawson Tait, to whose brilliant surgery we owe all we know of ectopic gestation.

Transactions of Societies.

BRITISH GYNÆCOLOGICAL SOCIETY.

MEETING HELD THURSDAY, NOVEMBER 13TH, 1902.

MR. A. W. MAYO ROBSON, a Past-President, in the Chair.

SPECIMENS.

DR. HERBERT SNOW showed a "Uterine Monoma (soft œdematous myoma of Lawson Tait)," a description of which will be found on p. 565.

The **CHAIRMAN** said that Dr. Snow's specimen was undoubtedly of extreme interest; it was very rare to have a combination of these two forms of tumour; in the absence of his notes he would make no assertion he had seen such a combination himself, but he thought he had done so.

MR. BOWREMAN JESSETT did not think that even the soft œdematous myoma was as common as one might suppose from Mr. Lawson Tait's account, but he had seen one or two cases in which a soft myoma, inside the uterus, was associated with other fibroids outside.

DR. MACNAUGHTON-JONES pointed out that the specimen had the appearance of a large fibrous tumour enclosed in a capsule. Degeneration might account for differences in consistency, and, with Dr. Snow's acquiescence, it would be well to refer the specimen for section and further examination.

DR. SNOW, in reply, said that among the many cases in which he had had the advantage of seeing Mr. Jessett operate upon, there had been certainly two or three, in which a large myoma, of the ordinary type, in the cavity of the uterus, had been associated with fibroids elsewhere, and which on a superficial examination looked exactly like his specimen, but were in reality totally different. So far as he was aware his specimen was absolutely unique. The late Mr. Lawson Tait evidently had not met with or heard of one instance in which the soft solitary œdematous myoma, the monoma as he (Dr. Snow) had called it, had been associated with multiple growths of the ordinary myomatous type. He readily concurred in the suggestion made by Dr. Macnaughton-Jones.

DR. MACNAUGHTON-JONES showed (1) An adnexal tumour with the appendix vermiformis. (2) A large blood-cyst of the right ovary with left cystic ovary and hydrosalpinx. These adnexa (1) were removed from a married woman, æt. 29. She had had two children and one miscarriage. The first pregnancy occurred twelve months after marriage, and the second eighteen months later. Shortly after her miscarriage, nine years ago, she was curetted for some recurrent hæmorrhage, and appears to have worn pessaries, on and off, ever since for an assumed retroversion of the uterus. Great pain, however, continued, and for this she was treated with morphia suppositories, having had as many as eight suppositories in the day. The first attacks of pain occurred at the right side, but for several years the pain had been diffused, and for a considerable time she had an offensive vaginal discharge. The catamenia were regular, but very profuse. Her difficulty in walking was due partly to pain, and partly to the feeling of prolapse. There was considerable pain also during defæcation. Constipation followed, and five years since she was operated upon for hæmorrhoids. There was no bladder troubles. On examination, the uterus was found fixed and pushed forwards by a large swelling in Douglas' pouch. The patient was much emaciated, and in a wretched state of health. Her recent medical adviser had enforced rest, stopped the suppositories, and used douches. On opening the abdomen with a comparatively small incision, I found the pelvis in great part occupied by a fixed tumour, evidently distended with fluid. Having enlarged the incision, I succeeded after a short time in isolating the large cyst, and delivering it without rupture of the sac. On delivery of the sac, after section of the pedicle, the fluid, some of which escaped, was found to be blood. The Fallopian tube was adherent and flattened out on the surface of the sac so as to give it the appearance of a hæmatosalpinx, for which, indeed, I mistook it, until subsequent examination proved it to be a blood cyst of the ovary. There was, as you see, a very broad pedicle, which was ligatured in two portions. The adnexa of the left side were found also diseased, a large cystic ovary and a hydrosalpinx. These were removed, the pedicles at both sides were covered, and then the uterus was fixed anteriorly to the fascia, the abdomen being closed with the usual triple sutures. The patient made an admirable recovery.

DR. MACNAUGHTON-JONES said this second specimen illustrated the necessity of careful pathological examination, as, when he removed it, he took it to be a hæmatosalpinx, as also did Mr. Targett when he first saw it, though on more careful examination he found it to be a blood-cyst of the ovary. It was a moot point in cases of the kind, whether it was better to remove the uterus or not. In this instance the uterus was small and perfectly healthy, and he thought the better course was to fix it to the abdominal fascia.

Mr. Charles Ryall, who was present when the first specimen was removed, said the way the appendix was attached, not only to the Fallopian tube, but to the ovary and surrounding parts, was remarkable. He related a case of double pyosalpinx after an attack of pelvic cellulitis and peritonitis, upon which he had himself operated two days previously. When he examined the case he came to the conclusion that the appendix was involved, and at the operation, after separating extensive adhesions, he found a long appendix, distended at its extremity beyond a stricture, lying on an enlarged Fallopian tube containing pus, and adherent to the right cornu of the uterus. The other tube also was affected, and both were removed with the appendix, and the patient was now doing well. It seemed to him more probable that in this instance the appendix was affected after the tubes, than that disease in the right tube, due to infection from the appendix, had afterwards extended to the left one.

Mr. Jessett had met with several instances in which the appendix was involved in adnexal trouble, as indeed he had mentioned in the paper he read before the Society at their last meeting. In one case the appendix was adherent to the fimbriated body, in another to the ovary, in a third to the right tube, while in one, in which there had been a former operation by another surgeon for pyosalpinx, the appendix was found attached to the stump of the old operation. In all such cases he thought that there were symptoms of appendicitis, but, as Dr. Macnaughton-Jones had more than once laid down, it was well to examine the appendix in all operations for adnexal trouble.

The Chairman (Mr. Mayo Robson) had met with at least three cases similar to the one under discussion. He recently removed the appendix attached to the stump of a uterus removed twenty years ago by an eminent London gynæcologist; there had been recurrent attacks of appendicitis during the whole of that time and there were extensive adhesions. In another patient, extremely ill a week after her confinement and supposed to be suffering from puerperal mischief, he found a suppurating appendix, fixed to the tube and ovary, both of which were involved in the abscess; the suppuration extended half-way down the tube, which was firmly glued to the ovary. In all cases where there was pain in the right ovary unaccounted for by prolapse, and tenderness between the anterior spine and the umbilicus, one should examine the appendix, and that was one reason against vaginal operation for adnexal disease. He thought Dr. Macnaughton-Jones had been quite right in not removing the uterus in his second case.

Mr. R. O'Callaghan read notes of a case of

EXTRA-PERITONEAL HÆMATOCELE,

which will be found on page 569.

Dr. Mansell Moullin said that the case was one of extreme interest, as the occurrence of extra-peritoneal hæmatocele had always been debateable, and even Mr. Lawson Tait said any such would be small, and therefore not require operation. It was certainly a very rare event, and one he had never met with in his own experience, and except as a very limited effusion from an intra-ligamentary gestation, he was inclined to doubt its existence. As the patient had recovered, they had no convincing evidence before them.

Mr. Furneaux Jordan concurred that extra-peritoneal hæmatocele was non-existent or extremely rare, and said he had never met with rupture of a tubal pregnancy in the broad ligament, and could not understand how a hæmatocele there could extend over the top of the uterus in the way described.

Dr. Edge referred only to the method of treatment. He had himself in days gone by packed a cavity in the way described, but thought that with the modern advantages of asepsis and technique, it would be better to find and tie the bleeding points, or even the uterine or ovarian arteries, and close the cavity with a continuous suture before closing the abdominal wound.

The Chairman said he sympathised with Mr. O'Callaghan in regard to his case, for in one in which he had made a diagnosis of extra-uterine gestation he was afterwards summoned and found a hæmatocele of the left broad ligament. If there had been in that case a secondary rupture of that broad ligament into the abdominal cavity, such as described by Mr. Lawson Tait, he certainly would have felt justified in opening the abdomen. He thought it was possible to have the exact condition, described by Mr. O'Callaghan, from rupture of the tube into the broad ligament and secondary rupture into the abdominal cavity.

Mr. O'Callaghan, in reply, regretted that the specimen had been accidentally destroyed; obviously he could not bring the broad ligament for their inspection, but he was certain the condition was as he had described it. The profuse hæmorrhage was due to secondary rupture, the extension of the hæmatocele over the fundus of the uterus to the mesenteric band, which he took to be a congenital anomaly; there was neither ovary of the tube on the right side. Mr. Tait did the same operation in the same way, and mentions in his book on "Ectopic Gestation" exactly similar cases, from one of which he removed as much as a quart of blood clot. Mr. O'Callaghan's patient had been for some days in hospital without thought of operation, when signs of fresh hæmorrhage came on; sighing respiration, a pulse of 142 and a temperature of 102° indicated immediate intervention, but in her condition it would not have been wise to prolong the proceedings by attempting to find all the bleeding points. Packing the cavity with cyanide gauze answered very well; she had no rise of temperature after the operation, and made a pleasant and happy recovery.

Mr. Furneaux Jordan showed a cancer of the cervix from a pregnant woman who had had persistent hæmorrhage for eight months, but, until the day before her admission into hospital, had no idea that she was in the family way. She was in the sixth month, but as there was no extension to the broad ligament or to the vaginal wall, he had thought it better to operate at once rather than wait till she might have a living child. He therefore amputated the cervix and then completed the hysterectomy, in the Trendelenburg position, by the abdominal route. The operation was easy, and she made an excellent recovery, and was at present practically well.

In reply to a question from Mr. Jessett, who had entirely endorsed the treatment of the case, Mr. Jordan said that he could not detect any enlargment of the lumbar or sacral glands, nor even felt them at all.

Dr. Edge showed a dermoid cyst removed from a woman six months pregnant; the cyst was adherent to the right hypochondrium and simulated a renal tumour; the pedicle was twisted. Though some of the contents escaped into the abdomen the patient did as well as possible, showing that, though strangulated and threatening in appearance, the cyst itself was not infected. There was no interruption of the pregnancy.

The Chairman congratulated both Mr. Jordan and Dr. Edge on their successful treatment of two cases of exceptional interest.

Dr. Macnaughton-Jones then read a paper on "The Propriety of Conservative Procedures in Abdominal Cœliotomy for Adnexal Disease," illustrated by two specimens, which will be found in our issue for November 19th.

Mr. Furneaux Jordan said that the question proposed was too difficult for a general answer; each case must be judged on its own merits. His own experience was that it was only in exceptional cases that conservative operations on the adnexa of one side, those of the other being incurably diseased, had any chance of success, and that if those of one side only were to be removed the disease must, practically, be limited to that side. It was, however, quite exceptional to meet with lesions warranting removal on one side, without some disease on the other. The condition of the tube was, in his opinion, of more importance than that of the ovary, in regard to conservative measures. He had found patients less anxious to save their appendages than their surgeons.

Mr. Jessett was strongly opposed to what he understood Dr. Macnaughton-Jones to recommend, namely, that if it was necessary to remove one ovary, and the other had one or two cysts in it, both should be taken away. He laid much stress upon the troubles following double oophorectomy, and dissented altogether from Dr. Macnaughton-Jones' dictum that both ovaries should be removed, even if there was only cystic disease in the second one.

Dr. **Macnaugton-Jones**: "Most emphatically that was not my dictum."

Mr. **Mansell Moullin** said the point seemed to be whether, when the appendages were hopelessly diseased on one side, but only partially so on the other, some conservative operation should be performed and the ovary returned. The important influence of the age of the patient had not been alluded to. If she was over forty years, and there was any doubt, he would say take them out at once; but if in a young woman the ovary should be retained. Like all other operators, he had had considerable experience of opening the abdomen a second time for some disease left behind at the first operation; on the last occasion after an interval of only ten weeks, and he had very little confidence in the value of partial operations.

Dr. **Edge** thought that the question should be discussed from two points of view; first, as to the tube and fertility, and secondly, as to the ovary and the possible results of its removal. There was no reason to remove a fairly healthy ovary, even although it were necessary to remove the tube on that side.

Mr. **O'Callaghan** quoted Mr. Lawson Tait's well-known dictum that if in operating for adnexal disease, the appendages on both sides were not removed, a second operation was always required. Simple cysts of the ovary, though found accidentally when the abdomen was opened for some other trouble, were not met with in one case in a hundred of severe adnexal disease.

The **Chairman** thought Mr. Tait's remark referred to gonorrhœal cases, but that the paper did so to adnexal disease in general. For himself he thought that, even in gonorrhœal cases, it was questionable whether it was ever right to remove a healthy ovary because one had to operate for disease elsewhere, and that the Society should not let it be supposed that it at all justified the removal of a healthy ovary on the ground that the other one was diseased.

Dr. **Macnaughton-Jones**, in replying, emphatically repudiated the idea, which was clear from what he had said, that he advocated the removal of such adnexa as Mr. Jessett referred to. He had been most particular to emphasise this. He referred to adnexa in which there was a reasonable doubt of the prudence of any conservative operation, and in which the balance of probability, after any conservative procedure, was in the direction of the need, in the future, for a second operation. He was speaking of partially diseased adnexa, and, as regards the influence of oöphorectomy on the mental side of the woman, the removal of affected adnexa in the instance of the insane was advocated by many most distinguished alienists; a course which was justified by reason of the cures which had followed operation. As to the ablation, under any circumstances, of sound adnexa, this, with the President, he altogether deprecated. Nothing could justify it. He was pleased at the President's emphatic disapproval of the idea. The conclusions he (Dr. Macnaughton-Jones) had summarised in closing his paper referred specially to that class of case in which the adnexa of one side were so diseased as to leave no question of removal, and those of the other so affected as to raise a reasonable doubt of the success of any effort to save them.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Surgical Section.

Meeting held Friday, November 14th, 1902.

Sir **Thomas Myles** read a paper on

LAMINECTOMY FOR PARAPLEGIA DUE TO SPINAL CARIES.

He gave details of two cases, of which one case was successful, and the other experienced no benefit. He discussed the opinions of Sir Victor Horsley and other surgeons, and expressed the opinion that early operation was to be recommended.

Mr. **Doyle** said that he performed laminectomy on a case in 1892. He found pachymeningitis and an abscess in front of cord. Cystitis was also present. The patient had had paraplegia, there was improvement for two or three days after the operation, but subsequently the case did not do well. Most cases would get well if treated by rest and extension.

Dr. **Swan** said one danger from the operation might be a rapid dissemination of the tuberculosis. Cystitis was one of the indications for laminectomy. Some years ago he operated on a case of spinal caries in a boy, in which there was paraplegia and great cystitis, the patient got relief from the bladder symptoms but none from paraplegia. The lumbar region was a bad place for the operation. In most cases paraplegia was caused by disease above the sixth dorsal vertebra. Laminectomy should be done as a routine, but he dissented quite from that. Recovery would come with rest and time extending over say a period of two years. With regard to the operation, he thought the best plan was when the muscles were scraped away first to trephine the bases of the lower spinous processes, and thus get access to the interior of the canal. An objection he had to laminectomy was that the patient was so helpless, could not sit up, nor use his limbs, and the extensive removal of muscles, &c., was a disability not recovered from.

Sir **Thomas Myles**, in reply, said he had only operated on two cases and they were practically experimental. There was a great deal to be said for and against the operation. It was a very serious operation, and a case showing signs of active caries, &c., would not be suitable for operation, but a case with only the paralysis should have the benefit of it. The treatment would be long and too expensive for hospital. The choice of instruments lay between the chisel and mallet, the trephine, or a Giglio saw. The chisel and mallet should be avoided on account of the concussion, &c., and he thought that a Giglio saw could be easily passed with a bent probe, and it might not be necessary to detach the muscles, but merely to turn them back as a kind of flap.

Mr. **Denis Kennedy**, surgeon to the Children's Hospital, read a communication on the "Radical Cure of Hernia in Young Children." He condemned the use of trusses, because they were frequently ineffectual in keeping up a hernia, and because the wearing of them was always associated with a great deal of trouble to the child. He demonstrated the safety with which the operation for radical cure can be carried out, by quoting sixty cases which he had done himself in children under five years old, many of them being under twelve months. In his operations he had three cases of strangulated hernia, all of which recovered. In two cases he met the vermiform appendix in the inguinal canal; in both he resected the appendix, as, on account of their size, he considered they could not with safety be returned to the abdominal cavity. He never had a death resulting from his operation.

Sir **Thomas Myles** thought the operation was a comparatively simple one. The points to be borne in mind were—the necessity for rapidity, arrest of all hæmorrhage, and great care in the administration of the anæsthetic. It was not necessary to carry out any elaborate treatment. Treatment by truss might be successful, but it was merely mechanical and took years to effect what the operator did in so many days. He did not think congenital hernia a common disease.

Mr. **McArdle** said he had operated at all ages from three months to eighty-four years, and he did not see why, in the absence of constitutional disease, the cases should not have the benefit of the radical cure. One complication of the operation he had met with was interference with micturition, and in these cases torsion of the sac had been carried out. In congenital hernias he found no difficulty in separating the cord from the sac if he passed his finger as far as the internal abdominal ring, where the elements of the cord can be felt. Another point was, in the case of a hernia with no posterior sac, such as the cæcum, where you have to push back the cæcum and ligature the portion of the peritoneum which is left behind. With regard to operations on children it was even more essential to split up the anterior wall of the inguinal canal than in the case of adults. All talk about dealing with the sac had no bearing on hernia. In repairing the stratum of the abdominal wall the external oblique had to be brought down to Poupart's ligament, but care must be taken not to displace the cord. In all radical operations we try to imitate Nature, which intended that the cord should lie over the pubis and not pass through a muscular opening. We expose the elements of the cord to intermittent pressure, which should not occur.

Dr. **Taylor** said that first, as to the question of the bladder, he would like to know if it had come into view in exposing the neck of the sac. He had frequently, in drawing the peritoneum upwards, seen the bladder appearing at the internal abdominal ring. He said he was with those who spoke against twisting the sac, and that it should never be employed. He had never had the least difficulty in the treatment of the sac of congenital hernia. He opened up the sac and then the testicle is seen, and he caught each end of it with a pair of clip forceps and put on another pair between, and this enabled him to cut with the scissors along a straight line. There were two different conditions in which the cord was found—one in which the cord lies behind the serous membrane, and one in which the cord is suspended by a fold of serous membrane in which it is floating. If you catch the sac in the middle you can form a serous ridge, and can peel the cord up to the internal abdominal ring. He said it was quite unnecessary to divide the aponeurosis of the external oblique. If you operate early enough you get the inguinal canal in a growing condition, and it accommodates itself to its new position.

Mr. **Tobin** said he differed with Mr. Kennedy on one point, and that was that treatment by truss was, as a rule, unsuccessful. If trusses are continuously applied and worn for one or two years, a radical cure is the rule. It was certainly a very tedious process and hard to carry out; but the fact that radical cure is by obliterating the sac showed that simple pressure was sufficient. Such treatment is out of reach of poor people, but those well-to-do like it, and it avoids the operation. As to the proper treatment for ordinary hernia, he thought that cure by operation was the proper method.

Mr. **Doyle** said he believed that only exceptional cases in children should be operated on. He thought a truss should always be worn for some time after operation.

Dr. **More O'Farrell** said in one case of a child of five months radical cure was performed on one side, and two days afterwards on the other side, circumcision being performed in the meantime, and the child recovered.

Dr. **Houghton** said that radical cure was the right cure and it was very little more dangerous than wearing a truss. The youngest case he had operated on was a child of three weeks. It was a seven months' child, greatly emaciated and very feeble.

Mr. **Lentaigne** said he agreed with Mr. Kennedy that for most hospital patients operation was the best treatment. It was impossible for the mothers in these cases to give the care and attention that the treatment by truss required. Even in the case of wealthy people operations should be allowed much more often than was the case. No complicated operation was necessary. A very simple procedure was sufficient. So long ago as 1884 he operated on an infant, æt. eleven months, for strangulated hernia. In that case the collapsed state of the patient was such that he had barely time to put in one or two sutures, yet he had recently seen that patient perfectly cured of the hernia by that apparently insufficient operation. He had found considerable difficulty in separating the cord from the sac in congenital cases, and he would be glad to try Mr. Taylor's plan next time he met with this difficulty. He had operated on many young children since 1884, and had never had a death, although the first case, already mentioned, had been extremely near to death.

Mr. **Kennedy**, in reply, said that in congenital hernia he had found it impossible to separate the cord from the sac. The elements of the cord formed part and parcel of the sac.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Meeting held Friday, November 7th, 1902.

Mr. Rickard Lloyd, President, in the chair.

Mr. **Alban Doran** read a paper on "Choledochotomy, in a Case of Chronic Jaundice with Cholangetis: Recovery," which will be found under "Clinical Records."

Mr. **L. Bidwell** mentioned the value of Lane's cleft palate needles in suturing deep holes in the common bile-duct. He thought fistulæ from the common bile-duct healed as readily as those from the gall-bladder. He considered that the stones which came away after the operation were probably concealed in the hepatic duct. At any rate, the patient cannot be promised that there will be no recurrence of symptoms. He had not used calcium chloride, as a gauze drain had always controlled hæmorrhage.

Mr. **Percy Paton** mentioned a specimen in the Westminster Hospital Museum, which showed dilated ducts in the liver, containing a large number of stones. As to the comparatively slight importance of a fistula after operation on the common duct, he had seen a case in which such a fistula began to discharge milk given by the mouth, and the patient died of inanition. He advocated the use of adrenalin chloride for controlling bleeding. Jaundice may not be present even when the duct is packed with stones.

Mr. **Pardoe** thought that the severe vomiting five days after operation might be due to cessation of the peristaltic action of the bowels, not uncommon in septic conditions in the abdomen. He had found suprarenal extract very useful during operations upon the urinary bladder.

Dr. **Clemow** asked for any experience of the internal administration of adrenalin. Five-grain doses every two hours had been followed by blanching of the nasal mucous membrane. This suggested the possibility of giving a few doses before such operations as Mr. Doran's.

Mr. **McAdam Eccles** had seen adrenalin of use in the vomiting of blood after gastral enterotomy, and also in a case of severe oozing from the corpus spongiosum after a plastic operation. He used it in 1 in 1,000 solution.

Mr. **Doran**, in reply, said that no doubt recurrence of the trouble was common. Carlsbad salts, however, seemed to help in preventing the formation of calculi. At the time of his operation he had adrenalin ready, but it was not used. Possibly the calcium chloride previously given had been of some use.

Dr. **Frederick J. McCann** read a paper on "Cases Illustrating some of the Septic Complications met with during the Puerperal State." In the first case, the patient had had a raised temperature since the second day, ranging between 101° F. and 103° F. When seen six weeks later, the uterus was found fixed in a mass of exudation, with evidence of softening in Douglas' pouch. The abscess was opened through the posterior vaginal *cul-de-sac*, and was found to be perimetric. The patient recovered. *Case II.*—A primipara, æt. 24; the lochia ceased on the third day; on the tenth day her temperature was 102° F., and she looked ill. The uterus was enlarged, and was found to contain from two to three ounces of pus. The cavity was swabbed with 1 in 4,000 corrosive sublimate solution. The patient recovered. This was an example of puerperal pyometra. *Case III.*—A primipara, æt. 29; on the eighth day she had symptoms of septic absorption; the uterus was swabbed as in the previous case. The patient recovered. The value was here pointed out of swabbing the uterus instead of douching. *Case IV.*—A lady, æt. 32, confined of her sixth child, afterwards developed pyæmia. Three subcutaneous abscesses formed, and she suffered from arthritis, with effusion in knee and ankle-joints. She recovered after a prolonged illness. In such cases the gravity of pulmonary complications was a guide in prognosis. *Case V.*—A primipara, æt. 25, developed parametritis followed by an abscess. The symptoms were delayed for ten months. A swelling was then detected in the right iliac fossa. The abscess was opened and the patient recovered. Such inflammatory deposits may disappear, or may suppurate. Dr. McCann ended by urging that labours should be conducted as carefully as modern surgical operations, and that as few vaginal examinations as possible should be made.

Mr. E. Lloyd thought strychnia of great service in such septic cases, its cumulative action, however, being remembered. Oxygen also was likely to be beneficial. As regards the causes of such septic conditions, the environment of the patient, or previous pathological conditions should be remembered.

Dr. Mansell Moullin divided septic infections into local and general varieties. In the local, the patient generally recovers, but the condition is a fertile source of gynæcological troubles. In general sepsis, the condition is either one of general septic peritonitis, or pyæmic in nature. In either case, the treatment is not very satisfactory. Dr. Moullin condemned the use of the curette in septic cases. He noted the fact that auto-infection is undoubtedly the cause of some cases of puerperal sepsis.

Dr. Chambers remarked on appendicitis as one of the obscure complications of the puerperium.

Dr. Clemow said that labour is a physiological process, and ought practically to be unaccompanied by rise of temperature. If, however, the lochia became offensive, careful douching was necessary. The douche-can should not be raised more than two feet above the patient's body. He advocated douches of 1 in 2,000 corrosive sublimate solution, or, better still, of chinosol.

Dr. Musson pleaded for greater power for the sanitary authority in regulating the midwives.

Dr. Drummond Robinson uttered a word of warning against the employment of the curette in the removal of portions of retained placenta. It might fail to remove the placenta, or it might give rise to septic infection. He also called attention to the frequency of cases of mild septic infection after labour, or miscarriage, the results of which only show themselves, perhaps, some time afterwards, in pelvic pains, &c.

Dr. McCann replied.

THE LARYNGOLOGICAL SOCIETY OF LONDON.

A meeting of this Society was held at 20, Hanover Square, W., on Friday, November 7th, the President, Mr. E. Cresswell Baber, being in the chair.

Mr. P. de Santi showed a case of tertiary syphilis of the larynx in a man, æt. 26. He had treated the patient four years previously for secondary syphilis, which cleared up. The patient returned in October, 1902, with hoarseness, some difficulty of breathing and slight pain. On examination, besides the signs of chronic laryngitis, there was a large, firm outgrowth from the left cord and considerable swelling in the interarytenoid space. For this condition, the patient had been under treatment for some time at the Throat Hospital. Mr. de Santi raised the question as to whether it would be advisable to perform thyrotomy and remove the diseased interlaryngeal area. Dr. FitzGerald Powell, who had treated the case at the Throat Hospital, was of opinion that the growth was pachydermatous in nature.

Mr. de Santi also showed a case of growth of the left vocal cord in which the diagnosis rested between tuberculosis and pachydermia.

The President showed a case of extensive fenestration of the anterior pillars of the fauces in a boy, æt. 13, and raised the question as to whether it was the result of ulceration or congenital in origin.

Sir Felix Semon thought that these cases were congenital, otherwise he saw no reason why the condition should be so often absolutely symmetrical.

Mr. C. A. Parker showed a case of double abductor paralysis with swelling of the arytenoids in a man, æt. 38. There was some dysphagia and some impairment of resonance of the right apex. But two examinations of the sputa had revealed no tubercle bacilli. There was a varying inequality of the pupils, but no other sign of nervous lesion. A large bougie could be passed, but seemed somewhat gripped about the level of the cricoid.

Mr. R. Luke showed a case of removal of the epiglottis for tuberculous disease in a man, æt. 35. The operation was undertaken for the relief of dysphagia, and had proved entirely successful.

Dr. J. Donelan showed a case of pedunculated laryngeal growth, probably dating from birth, in a boy, æt. 15. The presence of these growths had apparently caused stunted growth and depreciation of general health.

Dr. Scanes Spicer showed a readily-improvised working model to demonstrate the air-channels and currents in the nasal cavities in normal and impeded respiration. The results of experiments with this apparatus confimed those of Paulsen and Franke on the cadaver, and Parker's on the living subject.

Mr. F. Hunter Tod showed a case of left antral empyema followed by abscess of the hard palate and of the septum nasi, all of which were secondary to a severe attack of toothache. Mr. Hunter Tod also showed a case of double antral and frontal sinus disease in which the left side had been cured by radical operation. He now raised the question as to whether the right side should be similarly treated.

Sir Felix Semon showed a case of obscure lardaceous-looking variable infiltration of the uvula, soft palate, and right arytenoid in a lady. On examination the uvula and the adjacent parts of the soft palate were seen to be considerably infiltrated and smooth to sight and touch, and of a peculiar yellowish colour, resembling the appearance of a lardaceous kidney. The right arytenoid presented a similar appearance. There was some fulling on pressure about the external malleoli, but the urine had been found perfectly normal. The patient had been treated with arsenic and iron, and the local condition had somewhat improved. Sir Felix Semon had seen two similar cases, but did not think the condition had ever been described. He was unable to make any suggestion as regards their pathology.

Sir Felix Semon also showed a case of ulceration of the left tonsil, with acute and considerable enlargement of numerous cervical glands on both sides of the neck, in a man, æt. 70. The ulceration was apparently sequel to an attack of acute peritonsillitis, which had occurred six weeks previously. The patient's age and the implication of the cervical glands pointed to malignancy, but a piece had been removed for microscopical examination, and Mr. Shallock reported that he regarded the tissue as inflammatory, rapidly-growing granulation tissue.

Dr. FitzGerald Powell showed a case of cyst of the epiglottis which practically caused no symptoms.

Dr. A. H. Burt showed a case of epithelioma of the tongue in a single woman, æt. 24.

Dr. Furness Potter showed a case of recurrent ulceration of the pharynx and larynx in a woman, æt. 56, which he thought to be herpetic.

Dr. H. Tilley showed a case of vascular nasopharyngeal fibroma of extensive origin. Several attempts had been made to remove this growth, but without permanent success. Finally it was successfully and completely removed by a combined operation through the soft and hard palates and extensive removal of the anterior wall of the left superior maxillary bone.

Dr. H. L. Lack showed a case of complete adhesion of the soft palate to the posterior wall of the pharynx.

Mr. C. A. Parker showed a case of persistent epistaxis in a man, æt. 42, which had been going on for eighteen months, and had completely disabled the patient from work.

Dr. J. Dundas Grant showed a case of paralysis of the abductors of the vocal cords and of the palatal muscles, with slight paresis of the tongue, in a man, æt. 25, which he considered due in all probability to a lesion of the vagus nerves in or near the medulla oblongata.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD THURSDAY, NOVEMBER 6TH, 1902.

The President, Dr. JOHN ROBERTSON, in the Chair.

DR. G. WILKINSON showed (1) a case of palliative gastro-enterostomy for malignant obstruction of the pylorus. The patient's general condition had improved since the operation, two months previously. (2) A case of ruptured gastric ulcer, operated on fourteen hours after rupture. (3) A case of arterio-venous communication. The patient, a man, æt. 23, was stabbed with a penknife in the left thigh, near the apex of Scarpa's triangle, five months previously. There was free hæmorrhage at the time, which was controlled by firm bandaging and elevation of the limb. About a fortnight later a marked thrill and loud rough bruit were found in the region of the wound. The circulation through the limb was not interfered with, nor was there any œdema or wasting of the muscles. No definite swelling could be detected in the region of the wound. The thrill and bruit were conducted upwards along the vessels more distinctly than downwards. The absence of symptoms was explained on the hypothesis that a narrow channel of communication between the superficial femoral artery and vein existed, passing upwards from artery to vein, and so sending a jet of blood into the vein in the direction of the venous flow, and accelerating rather than retarding the stream in the vein. The thrill was gradually becoming less marked. No operative treatment was proposed.

Mr. **WILKINSON** also read notes of a case in which he had enucleated five large hydatid cysts from the liver, afterwards sewing up the fibrous capsules without drainage. The case made a good recovery.

Mr. **R. FAVELL** showed a large fibroid polypus of the uterus, and related a case of Cæsarean section for obstructed labour by an ovarian dermoid.

Dr. **ARTHUR HALL** showed (1) an extensive case of lupus affecting the greater part of the left arm; (2) case of erythema induration of Bazin, showing the characteristic scars: (3) a specimen of malignant intrathoracic growth, with a large thrombus filling up part of the superior vena cava. The patient had marked œdema of the right arm, face and chest.

Dr. **WILKINSON** read a short communication, entitled

A NOTE ON THE TREATMENT OF INTUSSUSCEPTION.

His remarks were based on four successive cases, all of which had been reduced by water syphonage. In one case the symptoms had lasted three days before the patient's admission to hospital. In another the intussusception was felt by the finger just inside the anus. He concluded that the method of syphon pressure was not deserving of the censure which many modern writers had bestowed upon it.

SOCIETY OF ANÆSTHETISTS.

The first ordinary meeting of the Tenth Session was held on Friday, November 7th, 1902, the President, Mr. WALTER TYRRELL, in the chair.

Before commencing the proceedings the President read a newspaper report of a case of death immediately following the administration of nitrous oxide gas; it appeared that the patient made a very slow recovery from the gas, and strong ammonia was therefore held to his nostrils. The post-mortem report showed acute congestion of the mucous membrane of the air passages The President, having had the report of the case sent to him anonymously with the suggestion that the ammonia had caused the congestion, and therefore the death of the patient, promised to inquire into the case and again bring it before the Society.

The **PRESIDENT** then called upon Dr. Starling, of Tunbridge Wells, to read the report of his case of Reflex Inhibition or the Heart during the Administration of Ether, in which manual compression of the heart was successful in restoring the circulation.

Dr. **STARLING** said that the patient was a male, æt. 65. The usual preparations were made for abdominal section for adhesions about the colon, and ether given by a Hewitt's large-bore inhaler preceded by gas. The patient was of the thin nervous type, and had a muffled bruit of the first sound of the apex; was otherwise healthy. The induction of anæsthesia was easy and normal. The appendix being found unhealthy was removed, then the pulse immediately began to flag; the respirations, which had been shallow, were not affected; more ether was given, but during the trimming of the stump both pulse and respiration stopped together. Artificial respiration by compression of the chest was started at once, without any effect; the surgeon (Mr. Lane) introduced his hand through the abdominal incision and felt the heart through the diaphragm—it was quite motionless; he gave it a squeeze or two, and felt it restart beating, but, as the voluntary respirations were still suspended, artificial respiration was continued, and other restorative measures adopted; the artificial respiration had to be continued for about twelve minutes, when natural respiration recommenced with a long sighing inspiration. The operation was completed without any more anæsthetic, there being slight movement while the skin sutures were being put in. Except a little pain about the diaphragm for two days he made a good convalescence. Dr. Starling said he had brought this case before the Society not only because of the successful treatment by direct stimulation of the heart, but because he thought it was somewhat unusual for a patient fairly under the influence of ether, to suffer to such an extent from reflex inhibition: and further, though the stimulus to the heart was enough to restart it, yet the steady persistence with artificial respiration was essential to the recovery.

Mr. **WILLET** said that he did not believe that patients suffered from reflex inhibition as a result of a light anæsthesia, and he did not think that it was dangerous on that account to keep patients lightly narcotised.

Dr. **BUXTON** then read reports of three cases of great interest in which he had had to administer chloroform for laminectomy for spinal injuries, in which, as the result of injury, the ordinary muscles of respiration, with the exception of the diaphragm, were paralysed. In these cases he had been obliged to resort to perflation in order to restore suspended respiration, since the ordinary methods of artificial respiration were inadmissible owing to the injury. These cases gave rise to some little discussion and Dr. Buxton replied to questions asked thereon.

Mr. **HILLIARD** read notes of a case of cerebral hæmorrhage during the administration of chloroform, the patient dying forty-eight hours after the operation.

France.

[FROM OUR OWN CORRESPONDENT.]

PARIS, Nov. 23rd, 1902.

CHLORIDE OF CALCIUM.

THE great hæmostatic value of chloride of calcium administered internally has not yet been entirely accepted by practitioners, and yet it can nearly in all cases be depended upon. Dr. Bertignon took recently as the subject of his *these* this drug, and furnished a series of cases in which chloride of calcium was proved to be an excellent hæmostatic.

It succeeded where perchloride of iron, antipyrin, ergotin, and hot injections failed. It is indicated in hæmorrhages of every kind, and in all maladies presenting hæmorrhagic complications. Hæmatemesis, hæmaturia, enterorrhagia, and metrorrhagia, are arrested rapidly by $CaCl^2$. M. Bertignon cites the case of a patient suffering from acute general purpura cured, where ergotine, perchloride of iron, citric acid, lemonade, &c., were tried without success.

Germain Sée, speaking on the subject, said that of all the coagulating solutions known, chloride of calcium was the most easily borne by the stomach. In more than one instance at the hospital had he seen it succeed when prescribed for grave hæmatemesis.

For intestinal hæmorrhage complicating a case of typhoid fever enemas of a drachm of the salt and half a drachm given by the mouth, with a little opium, have given very good results. It is especially indicated in hæmophylia.

The best formula, according to Dr. Bertignon, is:—

Chloride of calcium (crystallised), ʒj;
Syrup of opium, ʒiij;
Water, ℥iv.

To be taken every twenty-four hours and renewed as long as the hæmorrhage lasts.

Infantile Mortality.

Dr. Variol, two days ago, read a paper before the Committee on Depopulation, interesting with regard to infantile mortality.

The malady, he said, which caused the greatest number of victims in Paris was tuberculosis in all its forms. Out of 5,500 deaths, 2,700 were due to that affection. Infectious diseases, and of these the most dangerous measles and whooping cough, carry off 1,500 children yearly. Diphtheria and small-pox, thanks to serum and vaccine, are kept well under control, while typhoid fever was becoming every day more anodine by reason of the good water supply, but there existed a plague which it seemed impossible to check; he referred to hereditary syphilis.

The unfortunate children born of contaminated parents are condemned as soon as they see the light. Of 62,000 pregnancies yearly there are 9,000 products of conception still-born, the remainder perish in the proportion of 60 to 80 per cent. One half of the children of Paris are born and die in charge of the Administration of Public Assistance. The infantile mortality in the hospitals is formidable (5,500 yearly). This mortality might be considerably reduced if the hospitals had resources indispensable for the refection of the wards which, for the greater part, were of revolting insalubrity. Some of the hospitals have not been repaired since their formation. That of Les Enfants-Malades, for instance, which dates from the end of the eighteenth century, has received but little or no modification for many years.

Quadruplets.

The birth of quadruplets is reported to have taken place a few days since in Paris. The first child was of the male sex, and was still-born; the second was a girl, and the two last were girls and joined together above the thigh exactly in the same way as the recent Hindoo twins Radica and Doodica. A considerable number of cases of quadruplets are to be found scattered through medical literature. In Ireland such plural births are comparatively few; amongst 240,000 women who were delivered in the Rotunda Lying-in Hospital, from its foundation to 1900, only one case of quadruplets is recorded.

Germany.

[FROM OUR OWN CORRESPONDENT.]

Berlin, November 22nd, 1902.

At the Hufeland Society, Dr. Binz, of Bonn, discussed the status of

Alcohol as a Medicine.

He took up the position that for the sound, well-nourished man alcohol was unnecessary, and that the immoderate use of it was harmful for the individual and even for whole nations.

The question was different, however, when alcohol was considered as a medicine. Here it must be considered that it was an active remedy, and both its stimulating and its nourishing properties were to be considered.

In recent times, the well-known symptoms of excitement of alcoholic drunkenness have been looked upon as due to partial inhibition of certain regulating centres in the cerebral cortex, which under normal conditions prevent disordered movements and mental processes. As the measurement of psychical action resulting from measured doses of alcohol was difficult to carry out, the respiratory centre and the respiratory organs were turned to. The experiments which were begun more than twenty years ago were for the purpose of determining how respiration was influenced by doses of alcohol. It was shown that respiration was more than doubled by the drug, a fact which must be looked upon as an undoubted condition of irritation.

In a fasting condition alcohol acts more powerfully. Here the whole respiratory apparatus is placed in a state of activity by moderate doses of alcohol. Under normal circumstances the respiratory curve drops down below the normal curve. When no exhaustion is present we see a slight heightening of the respiratory curve, and this falls again in correspondence with the time of the day. In exhausted individuals the respiratory activity is considerably increased under the influence of alcohol. (The different experiments were carefully detailed).

As a result of his experiments the conclusions were: —Alcohol in moderate doses increases the respiratory activity in a moderate degree. The same doses increase this activity more markedly when the persons experimented on were fasting. The increase persisted even when the persons experimented on were sleeping or sleepy from the alcohol given. The presence of bouquet in wine further increases the activity.

As regarded the nutrient action of alcohol, similar experiments were made on people who had previously been brought into a state of equilibrium as regarded nitrogen, and it was found that an increase of nitrogenous disassimilation took place.

Cocainisation of the Spinal Cord.

This method of producing anæsthesia of the lower extremities has been before the profession of late, and was recently tried on sixty persons in the Breslau Clinik, every possible precaution being taken against infection. A good deal of pain was felt when the needle penetrated the dura mater, so that almost all the patients flinched at this point.

After the injection, or after the onset of analgesia, a number of unpleasant bye-effects were observed. Besides slight and transient pallor, nausea and inclination to vomit came on, sometimes culminating in violent vomiting, and very profuse sweating. Further, general restlessness, distress, and a feeling of tightness were felt, as well as intense tremor of the whole body or of the lower extremities. Several times patients felt a tickling or dryness in the throat. There was collapse in two cases. After operation the patients were, of course, put to bed. In a large number of them the action of the cocaine ceased with the analgesia. But in a large number after-effects of the most varied kinds were observed, some exceedingly disagreeable, if not actually dangerous to life. From simple loss of appetite and nausea lasting as long as three days, there were all degrees, up to vomiting lasting two days. Pain in the sacrum, back and neck were very frequently observed. Very frequently violent headache came on lasting several days. Lastly, there were abnormal weakness and sleeplessness for some days and singing in the ears. In a few cases there was slight retention of urine and some rise of temperature, but not above 38·8° C.

In consequence of these disagreeable bye-effects this method of producing analgesia has been given up in Mikulicz's Clinik, and more particularly so since ether has been employed in place of chloroform.

In other reports on the employment of cocaine by Bier unpleasant effects, sometimes lasting for several days, are noted. Nearly constant headache and a feeling of formication, as well as weakness of the legs, are observed, sometimes trembling.

In a young man suffering from sciatica a 2 per cent. solution was injected, and the above-mentioned symptoms appeared; the temperature rose to 38·9° C. and returned to normal in thirty-six hours. The analgesic effect was practically nil. After disappearance of all symptoms a 2 per cent. solution was again injected, but this time it was carefully sterilised. After a few hours a violent rigor came on, the temperature rose to 40·5° C., and there were violent pains in head and neck, restlessness, irregularity of pulse, and vomiting. The temperature subsequently rose to 40·8° C. Lumbar puncture was now made. The cerebro-spinal fluid was cloudy, and microscopical examination showed numerous polynuclear leucocytes. Albumin over 2 per cent. Bacteriological examination revealed nothing. The inflammatory process was therefore of a toxic and not of a septic nature.

Austria.

[FROM OUR OWN CORRESPONDENT.]

Vienna, November 22nd, 1902.

Rontgen Posology.

Holzknecht raised a question which has frequently been asked, viz., What is the strength that should be used when treating with this radiant and powerful agent? Teleky, he said, had given us different intensities for the treatment of skin diseases. Riehl had devised a colour scale, while Schiff had affirmed that the clinical aspect of the case was the safest guide. This assertion Schiff has now modified, and he now affirms that individual idiosyncrasy and the varying resistance of the organism must be the physician's guide.

Teleky relates a few cases in which he had applied the rays for many months, in one case for a year, for epilation, after which telangiectasis appeared. He now asks himself if the latter untoward circumstance arose from the method of application or the strength employed. Freund is confident this injurious effect will not arise if the operator abandons the use of the rays immediately he observes the slightest trace of dermatitis. Ehrmann discussed the very great difference in individuals in their power to withstand the untoward effects; some suffered severely, while others remained unaffected by the same ray. This, Holzknecht observed, was as true of morphia as it was in the Röntgen rays.

Psychiatrics and Neurology.

The Society for Psychiatry had been asked to inaugurate a course of lectures on their particular subject, which is a new departure in the scholastic training connected with the Vienna School. The first of the course was given last week, at which 200 post-graduates were present, and before leaving 110 inscribed their names as members for the whole course. Nothnagel's theatre was selected for the first meeting, but, presuming it would be too large, a smaller room had been secured for the succeeding lectures; the surprisingly large number in attendance, however, has induced the society to arrange with Prof. Nothnagel for the use of the theatre. The lecturer commenced with the initial stage of progressive paralysis, and by appropriate examples made his address both instructive and interesting.

Sulphuric Acid Burns.

At the "Gesellschaft der Aerzte" Haberer brought forward a patient, æt. 28, with a very large part of the face destroyed from contact with sulphuric acid. The skin was almost absent on the whole of the right side of the face and part of the left, which presented a large granulating surface. The right ear and eye were obliterated, as well as the right eyelids, and the left side of the nose was also partially destroyed. In consequence of the secondary changes that had taken place the sight was so much impaired that the patient could not count or distinguish coins between the fingers. The only relief possible for the patient was a large plastic operation.

Concretio Pericardii.

Ehrmann showed photographs and skiagrams of a patient whom he had treated for thirteen years for scrofula. In 1879 the patient suffered from deposit on the pericardium, and in 1885 glandular abscesses in the right supra-clavicular fossa, presumably due to scrofula, which, however, promptly yielded to anti-syphilitic medication and iodoform dressings. This was soon followed by pseudoarthrosis in the upper part of the right arm reaching down to its middle third, which probably arose from central gumma of the bones. The skiagrams showed the ends of the bones to be fan-shaped. A closer investigation of the patient's early life proved the syphilitic presumption to be correct.

The Operating Theatres.

GUY'S HOSPITAL.

Two Operations for Recurring Attacks of Jaundice.—Mr. Arbuthnot Lane operated on a woman, æt. 35, who had for some years suffered from recurring attacks of abdominal pain and jaundice, accompanied by tenderness in the region of the gall-bladder. A hard rounded lump could be felt in the edge of the liver, which seemed to be the gall-bladder filled with stones, while below the liver and on a plane considerably behind its outer margin another hard lump could be felt, which was even more tender than the other; it seemed as if this might be a stone in the common bile duct, but about this there was considerable doubt. On opening the abdomen the gall-bladder, which was about the size and shape of a thumb, was found to have become detached from the under surface of the liver, from which it hung by its duct and a loose mesentery; it was filled with stones and was very hard. The mass in the liver was dense, white, and hard, and extended from the edge of the liver upwards for nearly an inch and a-half; it bulged beyond the upper and lower surfaces of the liver and simulated a secondary growth in appearance. It was very difficult to say whether it was a secondary growth or a cavity in the liver distended with gall-stones; in either case it was clear that its free removal was the wisest course that could be adopted under the circumstances, consequently a wedge which included the lump and the adjoining portion of liver was excised. and the incised edges were brought carefully together by sutures. The large gall-bladder was found to communicate at its junction with its duct with the cavity in the liver which was clearly inflammatory in origin, suppuration having probably taken place about an obstructing stone. The diseased gall-bladder and its duct were carefully removed, and a gauze drain was left in the wound, which was closed.

The same surgeon operated on a man, æt. 21, for recurring attacks of pain and tenderness in the abdomen, which had recently been accompanied by the presence of jaundice. During the attacks the liver became enlarged but at the time of the operation it was practically of a normal size. The gall-bladder could be felt in its proper position; it was not enlarged, but was hard and tender, the tenderness being a marked feature; nothing could be felt in the common bile duct. There was no jaundice at the time of operation; the urine and fæces were also normal. The abdomen was opened, and the gall-bladder was found to be filled with small stones and its wall to be very much inflamed and thickened, and attached to the surrounding structures. The adhesions were carefully divided and removed, and an attempt was made to excise the gall-bladder and the cystic duct. On separating the gall-bladder from the under surface of the liver a cavity, about the size of a walnut, containing mucus and gall-stones was found in the under surface of the liver, which was evidently at one time an abscess cavity; it communicated with the interior of the gall-bladder through an opening in its wall. The gall-bladder and cystic duct were excised. The cavity in the liver was plugged with a gauze drain, and the abdominal wall was sutured except at the point of emergence of the gauze drain.

CHELSEA HOSPITAL FOR WOMEN.

Conservative Operation for Diseased Appendages.—Dr. Arthur Giles operated on a woman, æt. 23, who had been married about a year. She had been under treatment some time in the out-patients' department on account of retroversion of the uterus with fixation. As the condition did not yield to minor measures the patient was admitted with a view to separation of adhesions and ventro-fixation. The uterine fundus was found firmly fixed in the pouch of Douglas, and was first freed by separating the adhesions. On examining the uterine appendages it was found that both ovaries contained several small cysts, and both Fallopian tubes showed a remarkable appearance; in each case the tube had become divided into two portions, the fimbriated extremity having become separated from the rest of the tube at a point about two inches from the uterine end of the tube. The proximal part of the tube presented almost exactly the appearance of a vermiform appendix, its free extremity being smooth and rounded; the short portion representing the fimbriated extremity was somewhat atrophied. The patient before operation had expressed a strong desire that the ovaries should be saved if possible. The small cysts in the ovaries were punctured and an artificial ostium was made at the end of each tube by opening the canal of the tube and by uniting the serous and mucous cut edges with one or two fine sutures. The uterus was then slung up to the anterior abdominal wall by two silkworm gut sutures and the abdominal wound closed in the usual way in three layers. Dr. Giles said that the etiology of the condition was of great interest; the occlusion of the tubes practically amounted to a spontaneous resection, as if the tubes had been ligatured in continuity, and subsequently divided at the point of ligature. He thought the only way in which this could be supposed to have happened was strangulation of the tubes by bands of adhesion due to a very old standing peritonitis, which had also involved the uterus, and led to the adhesion of the fundus to the pelvic floor. He was led to adopt a conservative procedure, he pointed out, not only in deference to the express wishes of the patient, but also because, in the absence of any recent inflammatory condition, the case appeared to him eminently suitable for conservative treatment. Puncture of the small cysts in the ovary was generally sufficient, and he had never met with a case in which an ovarian cystoma developed out of an ovary so treated. It appeared to him somewhat doubtful whether the restoration of the patency of the tubes would be followed by pregnancy, but cases had been recorded in which conception had occurred under much less favourable conditions than obtained in this case, and he had therefore felt that it was worth while making the attempt. He believed that conservative operations on the uterine appendages might be performed with advantage in many cases in which at first sight the choice would seem to lie between the two extremes of ablation of the appendages and doing nothing at all. Palmer Dudley, of New York, and others have, he pointed out, done some excellent work in this field, and some of the results have quite exceeded their expectations. Naturally, he said, such conservative procedures must have definite limitations; they were out of the question in acute inflammatory conditions and in cases in which the appendages were considerably disorganised by disease. He drew attention to the way in which the artificial ostium had been made: in the case of one tube the end of it was simply cut off transversely, making a terminal opening; with the other tube he had slit the distal end for about half an inch, and then united the serous and mucous cut edges of each border; this gave an elongated ostium which approximated nearer to the normal condition, and was therefore, he thought, the better procedure. The after history of the case would, he considered, of course be a matter of great interest.

The patient made an uneventful convalescence, and left the hospital seventeen days after operation.

The annual meeting of the City Hospital for Diseases of the Skin will be held at the Mansion House, Dublin, on Thursday. the 27th inst., at 4 p.m. Sir Charles Cameron, C.B., M.D., will preside.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, NOVEMBER 26, 1902.

THE COMMONWEALTH OF SCIENCE.

The love of war, in the very nature of things, forms one of the strongest characteristics of the strongest nations of the world. Not only is it necessary for self-preservation, but it must also have previously played an essential part in the building up of the national edifice. In the modern comity of nations it has led to the formation of vast standing armies and navies, and to the creation of an armed neutrality which in itself is many times more costly than the administration of the whole government of former days. At no period of the world's history has the spirit of international strife and jealousy been more pronounced or more threatening and complex in its many ramifications. Under such circumstances the recognition of some common interest among a host of conflicting issues is a welcome harbinger of the future millennium of peace that has from the dawn of history filled the minds of philosophers. It may be that the fulfilment of the dream may depend on science, which has already conferred so many benefits upon mankind. So far modern discovery appears to have stayed the progress of peace by placing fresh weapons in the hands of Mars. For all that, there is much to be said in favour of the view that the rapid development of scientific warfare tends to render war more and more impossible. Be that as it may, there can be no doubt that science will benefit the world far more by the conservation than by the destruction of life. In that way the triumphs of scientific medicine provide a strong and solid basis of common value to every nation upon the face of the earth. The Röntgen rays were discovered in Austria, and a year later they are being applied in every part of the world. The tubercle bacillus demonstrated at Berlin straightway becomes the property of all civilised nations. The principles of aseptic surgery being announced in Great Britain forthwith revolutionise the practice of surgeons in all Christendom. The fact is, that in scientific medicine there is rivalry without jealousy, and the fruits of discovery belong in the truest and widest sense to all mankind. This gospel was clearly in the mind of Lord Lister when addressing a meeting called recently in London with the object of contributing to the memorial to be raised to the late Professor Virchow. The labours of that distinguished man of science belong essentially to the commonwealth of nations, and it is fitting that a monument to his genius should be cosmopolitan in its foundation. Indeed, as Lord Lister hinted, it would be appropriate were we or any other nation to erect our own statue to Virchow, who is the world's benefactor. Precisely the same line of reasoning applies to that great and original genius, Pasteur, and, if it be permitted to say so, to Lister himself. The struggles for survival amongst the peoples of the world stand recorded in many a sordid page of history, redeemed, it is true, here and there by noble and stirring achievements. The struggles of science, on the other hand, are still, as it were, the mere skirmishing of outposts, but their success has been such as to inspire confidence in the approach of an overwhelming conquest at no distant future. Meanwhile, it is pleasant to find that the self-sacrificing and devoted labours of workers in the field of scientific medicine are obtaining in some measure the meed of universal approbation.

THE MOTOR-CAR AND THE MEDICAL PROFESSION.

The motor-car has come to stay. In spite of the grumbles of motorphobists it is rich in possibilities of health and happiness. The introduction of any new pleasure is almost inevitably accompanied by opportunities for the development of physical defects, and every fresh occupation may speedily lead to associated morbid states. But such can be accounted for as defects of virtues. Certainly the advantages of the automobile far outweigh its drawbacks. And the medical profession may well welcome its advent on many grounds. That enthusiastic octogenarian, Sir Henry Thompson, whose recollection goes back to the good old coaching days, when railways were indeed rarities, has recently issued a charming little volume of praise for the motor-car, and much sensible advice regarding its nature, use and management. For professional work, especially in certain districts, the automobile furnishes medical men with a rapid and convenient means of locomotion, saving time and in the near future, it may be hoped also saving money. No doubt in some country towns, and especially in hunting districts, medical men will be deterred by local prejudice, but, generally speaking, the automobile will simplify travelling for professional purposes. And we venture to think it will not be long before many of our large hospitals, and especially such institutions as sanatoria for consumptives, realise that in the automobile they have a ready means of providing health-restoring measures for their patients. At the present time in connection with many asylums and establishments for the crippled, blind, or otherwise deficient, occasional drives are provided at considerable expense, and necessarily very limited in application. The Boards of Management of such places should consider the opportunities which the automobile places at their disposal. But not only as a pleasurable means of travel for the healthy, and a convenient method for conveying the injured, sick, and convalescent, the automobile may be welcomed as assisting in securing a more sanitary condition of our streets. The accumulation of horsedung and the decomposition of equine urinary secretion, although custom has more or less taught us to regard such conditions as quite fit and proper, afford nevertheless hygienic errors which a more enlightened age will wonder we could ever tolerate, and that certainly play a part in the impairment of health, and doubtless, at least to some extent, are instrumental in the actual initiation of disease. No one can calmly consider the advent of the automobile without recognising that it may be of much service in the prevention of morbid states and useful in assisting in the restoration of the diseased. No doubt for long the farmer and other constitutional grumblers will protest against the motor-car " huzzin' an' maäzin' the blessed roäds wi' the devil's oän teäm," but doctors, sanitarians, and sufferers may well accord the new steed a warm welcome.

THE CONFLICT OF MEDICAL TESTIMONY.

We published last week an article dealing with what may be called the etiology of conflicting medical testimony, by Mr. Ormsby, the president of the Royal College of Surgeons in Ireland. The subject is one which invites discussion, not only because this divergence of opinion places the medical profession as a whole, and medical experts in particular, in an unfavourable light before the public, but also because, by studying the cause of these contradictory opinions, it may be found possible, if not to obviate them, at any rate to reduce them to a minimum. To begin with, the medical assessor who visits the plaintiff on behalf of a defendant company or person and the plaintiff's medical adviser in reality inspect two different men. The frame of mind and outward aspect of the individual present extraordinary differences according to the circumstances under which he is interviewed. To the one he willingly confides everything that can assist him in a diagnosis, to the other he as willingly hides everything that can be concealed without positive *suppressio veri*. If both medical examiners could inspect the patient under precisely similar conditions no doubt one great factor in the production of divergent opinions would be obviated. Although Mr. Ormsby suggests sundry means of minimising this source of error, it is probably inherent to the present system of pitting medical witnesses one against the other, instead of appointing a medical assessor on behalf of the court, who would presumably be absolutely neutral as between the parties. Admitting, with the author, that certain disadvantages attend the practice of the expert examination being made in the presence of the ordinary medical adviser of the plaintiff, it is unquestionable that the advantages outweigh the drawbacks. We can hardly conceive of an examination carefully carried out by two medical men in each other's presence which would leave room for any difference of opinion between them as to the reality of the existence of certain signs and symptoms. The only possibility of disagreement between them lies in the importance to be attributed to the subjective symptoms, and, after all, this is not a point as to which medical evidence can be reasonably expected to throw any light. Their significance turns solely and wholly on the credibility of the patient himself, and this is a matter which the jury must decide. As the author points out, it is exceptional for any serious difference of opinion to become manifest in court between practitioners or between a practitioner and an expert. It becomes disagreeable when two or more experts are pitted against each other, each straining a point in favour of the party in whose interests he has been retained. In all probability this would be avoided if the same line of conduct were followed, viz., that no examination of the patient should take place save in presence of ALL the medical witnesses in the case. We repeat that it must always be possible to agree as to the existence or otherwise of objective lesions. As to the significance to be attached to these lesions, in other words the gravity or otherwise of the prognosis, of course there are two ways of looking at it. There is the optimistic and the pessimistic way of considering the future. No fault can be found with medical witnesses in respect of any conflict of opinion in this connection. Medical men are not prophets by nature or by training, and only a limited confidence can be accorded to their views when they leave the region of established, observed fact and launch out into what is mere hypothesis. Nevertheless, it is of assistance to an intelligent jury—would that there were more of them—to know the best and the worst prospects of a patient under given circumstances.

Notes on Current Topics.

Modern Sanitary Aims.

The simple trust of the early public health reformers, such as Parkes and Farr, in a great sanitary future was not unfounded, if we may judge of the fruit borne by the trees which were in great part planted by their energy and wisdom. The mortality rates of the United Kingdom have been steadily reduced in every decennial period for the last fifty years, but, in spite of the enormous improvement in that direction, there still remains a broad margin of preventible and unnecessary disease and death among the community. Progress is slow, inasmuch as the practical administration of advanced hygienic measures is vested in the hands of the people whom it is proverbially hard to move to enthusiasm over matters of reforms. The chief sanitary aims of our municipalities are curiously alike. The wants of the one are the wants of the many. Bristol may be taken as a good type of a modern town progressive from the public health point of view. The objects of its Health Committee are formally announced as embracing, first and foremost, the erection of ample infectious disease accommodation, especially for small-pox. The slums are to be purified and abolished by closing unwholesome houses and by clearing insanitary areas. Public abattoirs are called for, together with the improvement or abolition of underground bakehouses. These points represent great obstacles that stand in the pathway of every large municipal authority, and some of them are also to be met with in the smaller towns and the country districts. Bristol has been well rewarded by its reduced death-rate for the steady, sagacious, yet withal moderate policy administered by its past and present Medical Officers of Health.

Excessive Ventilation.

The supply of fresh air in hospital wards has been ventilated of late in the Press with an insistence which suggests that there may be a real grievance calling for remedy. We may dismiss the allegations that draughts cause patients to develop pneumonia, but the actual discomfort which results from too direct a current of fresh, and often cold air, may well have a prejudicial effect on the sick. Moreover, the very existence of such currents of air testifies to an absence of scientific methods of dealing with the question of ventilation. It is possible to renew the air of wards as often as is required without the introduction of large quantities of cold air from the outside, and to turn windows into permanent inlets is an unscientific proceeding, a relic, in fact, of pre-sanitary days, utterly unworthy of the actual state of the science. This point should receive the attention of the authorities, for the comfort of patients is almost of as much importance as their treatment.

The Grievances of the Navy Medical Service.

That the condition of the Navy Medical Department is not satisfactory is conclusively proved by the dearth of candidates for that branch of the service. It has been estimated on good authority that the Navy at the present moment is short of at least fifty-seven officers on its peace footing alone. The reasons for that serious deficiency are obviously to be found in the unpopularity of the Service. The question has been dealt with in an incisive way by the *Naval and Military Record.* According to that journal all our naval officers are underpaid, and the key to the problem lies in granting naval surgeons pay and privileges equal to those enjoyed by their military *confrères.* In the Army there are sources of additional pay, such as Indian and staff and many other appointments, which are wanting in the Navy. The great difficulty with the Admiralty, in approaching an increase of pay for the Navy surgeons, appears to lie in the fact that a concession to the Medical Department would add to the existing discontent among combatant Navy officers at the relative inadequacy of their pay. Two wrongs do not make a right, however, and we agree emphatically with the editor of the above-quoted journal when he urges the necessity of facing the whole question. The gilt has been rubbed off the gingerbread so effectually that it is impossible for the Admiralty to fill up the vacancies in the Medical Department. What would happen, we wonder, in the event of a great naval war?

Lethal Halls.

The evil due to attending meetings in crowded and badly ventilated buildings is hardly estimated at its proper value, even by members of the medical profession. Everyone who has been for any length of time in an imperfectly ventilated church or theatre must be familiar with the symptoms of foul air poisoning. The headache, the feeling of sickness, the faintness, are well-recognised consequences of the mixed poison of carbonic acid gas and of organic effluvia thrown off from the lungs of those present. As a rule relief is obtained at once by the simple expedient of going out into the fresh air. Now and then, however, the results are more serious. At a recent meeting of the Rugby Guardians one of the members, Dr. T. S. Townsend, attributed the death of their late chairman to trouble that was in the first place due to the bad ventilation of the room in which they met. The illness of another Guardian he ascribed to the same cause. In his opinion they were all being slowly poisoned. After this strong indictment the Rugby Guardians will probably look about for more wholesome quarters, unless they are prepared to be decimated periodically in their zeal for public economy. The lesson to be learned from the incident is of wide application, and local bodies throughout the Kingdom might well lay the moral to heart. It would be better for everyone concerned were medical men more generally inclined to enforce the salutary maxims of hygiene in the practical manner adopted by Dr. Townsend.

An Unrepentant "Vanity Fair."

Our sprightly contemporary, *Vanity Fair*, which adds its weekly quota to the gaiety of the British nation, seems to take a malicious pleasure in holding up from time to time members of the medical profession to the public gaze in its cartoon pages. Why its editor should persist in forcing this unwelcome attention upon reluctant "medicoes"—as he is fond of calling them—is best known to himself, although possibly this stirring up of the waters represents good journalism—that is, from the point of view of circulation. In the issue of November 20th *Vanity Fair* publishes a letter from a correspondent anent Sir William Broadbent's condemnation in the *Lancet* of the lay journal's cartoon as "undesirable publicity." The writer urges that notice of that kind is simply a penalty of greatness. "There is a fierce light," he continues, "which beats upon the eminent politician, advocate, ecclesiastic, sailor, merchant, philanthropist, or criminal, even as it beats with fiercer light and more blazing indiscretion upon the occupant of a throne." This explanation lacks clearness. The only categories under which the medical man can be placed, *quâ* medical man, appear to be those of philanthropist or criminal. Philanthropy we believe to be a universal trait of the medical profession, but it is hardly of the kind that can derive additional lustre from the pencil of the cartoonist. The condemnation of the medical profession of this kind of publicity is complete and emphatic, and any editor who wilfully ignores that attitude can hardly be said to follow the unwritten laws of high-class journalism.

Primary Ether Narcosis.

Most anæsthetists are agreed that there is no anæsthetic so safe in ordinary work as ether, and consequently any extension of its field of applicability is of considerable interest. Ehrich and Ludeck have recently pointed out that after a few deep inhalations of ether there is a temporary narcosis, during which there is analgesia, though the sense of touch is not interfered with, and Ehrich has been in the habit of making use of this period for the performance of brief operations, such as the opening of boils or extraction of teeth. No special apparatus is necessary for such administration of ether, and in this way it has certain advantages over gas, so that the method at any rate deserves a trial.

Inadequate Hospital Reports.

The want of some sort of uniformity in the financial and administrative report of the medical charities has long been apparent. This abuse has been recognised by the Hospital Funds, and has to some limited extent been legislated against by those important distributing bodies who make a routine detailed return of certain specified facts, a condition preliminary to granting an award. Their action is commendable, and would be more so were it not accompanied by a tendency to sit in judgment and to travel far afield outside the function of distribution by imposing further and sometimes clearly ill-considered conditions upon the hospitals. A case in point is the withholding of a grant except on the completion of sale of a certain institution, a step which was explicitly condemned by at least two leading medical journals, and acknowledged by the committee concerned as not likely to prove of financial benefit to the hospital. It would be more in consonance with the objects for which the funds were created if they made every award conditional upon the publishing of a full statistical report. For instance, in order to obtain any clear idea of the economy and efficiency of a medical charity, it is absolutely necessary to know such details as the cost per head, the cost per patient, and the cost per bed occupied. Were the Funds to insist upon some such scheme of report they would be more likely to do justice to the hospitals, great and small, that are conducted upon principles of economy and sound finance. At present their system seems framed to encourage reckless and unbounded extravagance on the part of executive committees. The greater the debt the greater the claim upon the charitable public is apparently their accepted maxim.

Rectal Feeding.

Notwithstanding the manifold and conspicuous advantages of rectal feeding in certain diseased conditions, such as obstruction in some part of the alimentary canal, persistent vomiting, inanition, and so forth, it may be doubted whether the method is resorted to by medical men as frequently as it deserves. The chief cause of this unmerited degree of neglect is probably to be found in the disinclination of patients, so to speak, to reverse the current of alimentation by artificial means. Of the food that may be appropriately administered *per rectum* eggs appear to be most suitable, chiefly on account of their concentration of nutriment and their non-irritating nature. A fair allowance of salt, about fifteen or twenty grains to each egg, is a powerful aid to absorption, which is further promoted if the bowel be previously washed out with a simple warm water enema. Beef-tea and milk are not so suitable for injection, chiefly because of their large bulk in relation to nutritive value. Both should be well salted, a remark, indeed, which applies to all forms of rectal alimentation. Peptonised food is often useful, and is absorbed much more quickly than eggs, although the sustaining properties of the latter, in many cases, more than counterbalance the advantages due to a slower rate of absorption. Fat should be carefully avoided. Sugar is readily absorbed by the mucous membrane and may be given in quantities of an ounce or more daily dissolved in half a pint of water. Most practitioners will find themselves amply repayed, sooner or later, by a careful study of the facts of rectal feeding.

Reversed Peristalsis.

Most medical men have from time to time met with cases of obstinate constipation accompanied by vomiting, more or less fæcal in nature, where the natural downward course of the peristaltic movements seems to have fallen altogether into abeyance. The condition is always a serious one, for the patient gradually and speedily absorbs more and more fæcal poison, and unless appropriate treatment be instituted a fatal termination is not unlikely. A series of eighty-nine such cases has been investigated by Mr. Mohroof (*Indian Medical Gazette*, October, 1902), and he arrives at the conclusion that in most of them the peristaltic movement is not merely not abolished, but actually takes place in a reverse direction. In several cases he has seen enemata vomited, apparently unchanged, some minutes after the injection. As regards treatment, he holds that the administration of purgatives of any sort is not only injudicious but positively dangerous, and he recommends absolute abstention from food coupled with the administration of opium. In the course of two or three days the vomiting generally ceases, and the bowels may begin to act, the return to the normal being aided by massage of the abdomen.

Appendicitis in Mummies.

No one doubted that the disease now so well known under the barbaric name of appendicitis was of ancient lineage, although it is only within the last quarter of a century that its pathology has been elucidated. Still, it is rather startling to learn that indisputable evidences of appendicitis have been discovered in a certain number of Egyptian mummies. Dr. Lannelongue, of Paris, described the results of his investigations in this direction before the French Academy of Medicine last week. He is unfortunately not in a position to formulate any conclusions as to the frequency of the disease among the ancient Egyptians, although incidentally he asks us to infer that it has become much commoner of late owing to the more general consumption of meat, an hypothesis which will not command universal acceptance. Of course, food largely composed of albuminous substances is more amenable to decomposition, and the poisons elaborated by the micro-organisms which effect this change are more lethal than those which attack vegetable *debris*. It is therefore conceivable that such a food would offer a favourable pabulum for marauding microbes. It is, however, infinitely probable that the remarkable frequency of the disease at the present day is apparent rather than real, and is due merely to more exact diagnosis. The statistics of appendicitis, indeed, are open to the same fallacious interpretations as those of cancer, the prevalence of which is also in great measure a mere question of nomenclature.

Fanatics and the Public Health.

Dr. J. F. Dill has drawn the attention of the medical profession, in the course of a presidential address to the Brighton and Sussex Medico-Chirurgical Society, to the lamentable consequences which every day result from the unchecked dissemination of syphilitic infection. Surely, never were good motives prostituted to such a purpose as when weak-minded, though perhaps well-meaning, fanatics succeeded in turning the nation from the path, which would, by this time, have brought thousands of people to a new standard of health and strength instead of leaving them a prey to a loathsome disease and a source of danger to the most innocent of their neighbours. The opponents of the "C.D." Acts come of a stock whose *forte* consists in telling the nation, or the rulers of the nation, to "count the cost" of their actions in particular cases. Can they themselves ever estimate the cost of their ill-advised outcry, or tell the amount of misery, disease, and death which has been entailed on innocent people by that outcry? Dr. Dill's words are well worthy of repetition:—"We have with ease stamped out rabies, and our forefathers banished leprosy; we isolate the zymotic diseases, and quarantine small-pox, but if a man has syphilis he is permitted to transmit it to whom he will—to the child whom he kisses, to the first friend who smokes his pipe, or to the healthy and innocent girl whom he marries." The result, as the speaker pointed out, is that thousands of helpless infants and children suffer or perish from the most loathsome of all diseases, and thousands of men and women spend their life suffering through no fault of their own. This terrible legacy, which we are handing down to posterity, is not the result of ignorance of the cause and mode of infection. It is due to the fact that a certain section of the British race demanded what they considered to be an easy conscience even at the price of the misery of thousands.

Bequests of Brains.

Professor Wilder, of the Cornil University, U.S.A., is making a collection of brains for the purpose of scientific investigation. It is not particularly difficult to obtain the brains of criminals, paupers, and of the lowly in general, but for purposes of comparison a number of more highly-developed brains is of course indispensable, and it is here that the difficulty has arisen. Professor Wilder accordingly makes an appeal to eminent men of all denominations to place their brains at his disposal, and it is reported that a certain number have acquiesced in his demand, and have made testamentary arrangements accordingly. The Professor ultimately hopes to be enabled to throw light upon the vexed question whether the conformation of the brain is materially influenced hy studious habits and training; in other words, whether intellectual acquirements can in any degree be transmitted from parent to offspring. We know that big brains, like big bones or big muscles, are inherited as family traits, but it is also very apparent that the possession of a big brain is not necessarily associated with the desire or the ability to turn it to useful account. The qualities which go to make a really great man are many and varied, and the mere possession of a potentially active brain is perhaps not the most important factor in this direction. Physiological investigation throws no light upon the wonderful system of ramifications in virtue of which a person possesses to the full the intangible faculty of the associationship of ideas. This depends upon recondite anatomical structure, which so far has baffled the closest observation.

Hyoscin and Morphinism.

Attention has been directed recently, particularly in America, to the study of the treatment of morphinism, and it has usually been found necessary when morphia is withheld, to substitute temporarily some other sedative drug, which, in its turn, is withdrawn before its "habit" has been established. The most successful, and probably the most popular, of these secondary drugs is hyoscin, and it has become the fashion in such cases to prescribe it in large, even in massive, doses. As is natural after a trial of some years, a better knowledge of the physiological and toxic properties of the drug now prevails, and it is found that much caution is necessary in its use, and that anything in the way of a routine treatment by hyoscin is fraught with considerable risk. In a well considered and temperate article in a recent number of the *Medical News* (October 18th) Dr. Pettey, of Memphis, makes a vigorous protest against certain teachings regarding the use of hyoscin which have received the sanction of physicians of great authority. By an appeal to the records of his own practice he shows that there is no drug whose effects vary more widely with different individuals, and that even small doses, *e.g.*, one-hundredth of a grain, repeated twice with intervals of an hour, may produce disastrous results. The use of hyoscin is perhaps not so well known in this country as it ought to be, but if it is to be adopted, the possibility of individual idiosyncrasy must always be borne in mind.

Electricity in Medicine.

It seems not unlikely that within the next generation or two electricity will have become the universal servant of mankind. Recent wireless messages exchanged between England and America mark a new era, the extent of which it is difficult to imagine. Curiously enough, these achievements have been won by scientists who have not as yet been able to determine the exact nature of the mysterious and apparently all-pervading natural force with which they are dealing. An attitude of that kind is common enough in medicine, where the steady accumulation of facts often leads to sound deductions as to curative treatment which are perfectly effectual, although based upon empirical grounds. From recent observations it seems justifiable to hope that in no distant future we may find electricity a valuable agent in dealing with cancerous growths, a malady the origin of which is still unknown, in the shape of focus-tube radiations and currents of high frequency of interruption. One of the latest developments of applied medical electricity is the suggested production of local anæsthesia. A series of experiments have been reported to the French Academy of Science by M. Ledac, of Nantes. He claims to have produced complete anæsthesia in lower animals by the use of electric currents of from ten to thirty volts, interrupted from 150 to 200 times per second. The upshot of this investigation will be awaited with interest, for the advent of a safe anæsthetic such as this promises to be, whether local or general. would be a matter of considerable importance in the medical world.

The Harveian Society.

A discussion, which promises to be interesting, is to be opened at the meeting of the Harveian Society on Thursday, December 4th, by Mr. C. B. Lockwood, on "The Surgery of Acute Appendicitis." The discussion is open to any member of the medical profession who may desire to attend.

The Ætiology of Vesical Calculi.

The perennial subject of vesical calculus has recently been made the subject of a very interesting communication to current surgical literature by Mr. F. C. Madden, the recently-appointed Professor of Surgery in the Egyptian Government Medical School at Cairo. As might be expected, Professor Madden discusses the matter more especially from the standpoint of the Egyptian inquirer. He tells us that the development of a certain proportion of Egyptian calculi depends upon the presence of the pathological products of *Bilharzia hæmatobia* throughout the urinary system. It has been stated that the nucleus of many of those stones has been a Bilharzia ovum; but Professor Madden thinks that it is more reasonable to suppose that the nucleus really has been a piece of a papillomatous Bilharzia tumour (which would naturally contain ova) that had become detached and subsequently incrusted with phosphates. Certain calculi originating in this way are quite white in colour, and consist wholly of phosphatic salts. This is not surprising after one has seen the post-mortem appearances of an aggravated case of Bilharzia, which had affected the pelvis of each kidney, the ureters, bladder, and urethra. But *all* Egyptian calculi are not of Bilharzic origin, and a further explanation is easily ascertainable. The universal drink of the whole native population of that country is Nile water, which during some months of the year is known to be strongly impregnated with lime salts, gathered from the limestones of the country through which the river passes in a considerable part of its course. The natives of Egypt and of the Soudan are almost exclusively vegetarian in their diet; meat being taken only in small quantity, and usually, even then, in the form of soup, which only serves as a vehicle for vegetables. Green vegetables are the special favourites. It is suggested that excessive acidity of the urine develops from the continuous excretion of an unusual quantity of vegetable salts; and, accordingly, without any stimulus in the form of a nucleus, some combination of uric, or oxalic, acid occurs. This, of course, becomes deposited; and will continue to be deposited so long as the same causative factors persist.

Errors in Dispensing.

Some apprehension has been caused among the public of late by the occurrence of several fatal accidents due to errors in dispensing by medical practitioners. Obviously the practitioner who is inadvertently the cause of such an accident is almost as much to be pitied as his victim, but after reading the evidence given at the inquests it is impossible to resist the conclusion that the observance of certain elementary precautions would in every instance have obviated the fatal contingency. It cannot be denied that the dispensing doctor is more exposed to errors of this description than the dispensing chemist, whose attention is concentrated for the time being on the prescription before him. This not only places him on his guard against possible error, but he is also enabled to detect and rectify any slip in the prescription. The practitioner, on the contrary, has to do his dispensing after his return from his rounds, that is to say, when he is tired and his attention less on the alert. All the more reason, it may be urged, that he should take extra precautions to avoid the possibility of error, and it must be admitted that there is a margin for improvement in this respect. The simple precaution of keeping poisons in a special cupboard under lock and key, and the dispensing of poisonous liniments, &c., in bottles of distinctive colour and shape, would go far to avert the risk. Perhaps these lamentable mishaps will serve as a lesson to those who have had the good fortune to escape.

The Virchow Memorial.

A MEETING of the Virchow Memorial Committee was held on Friday evening last, with Lord Lister in the chair. In the course of his remarks the chairman concurred in the general principle that monuments of departed eminencies ought to be erected by their countrymen. To this rule, however, he admitted certain exceptions—as, for instance, in the case of Pasteur, whose scientific work had benefited all mankind. So, also, with Virchow, whose work in pathology had benefited the study of medicine throughout the world. It was announced that over a hundred adhesions had already come in, and the chairman, in disadvising any limit to the amount of subscriptions, made the novel suggestion, one worthy of more general adoption, that the amounts contributed by individuals should not be published. Public opinion will, we feel sure, thoroughly endorse Lord Lister's estimate of the value and cosmopolitan importance of the late Professor Virchow's labours. It may truly be said that his teaching was not "accepted," for it imposed itself. It altered the whole status of pathology and illuminated departments of study previously pursued under the depressing influence of *quasi*-obscurity. In this sense every pathologist in the world was a pupil of Virchow's, and it was meet and proper that all should be permitted to testify respect and admiration for their departed master.

The Gospel of Fresh Air.

THE virtue of the open window is unquestionably making headway, and the gradual spread of the gospel of fresh air among the working-classes will, in the long run, be productive of the greatest benefit. Unfortunately in our large towns the aggregation of inhabitants in comparatively small areas gives rise to more or less noise, part of which is distinctly avoidable. The open window, as many find to their cost, admits noise even more freely than fresh air, and sound sleep is thereby often rendered impossible for people of sensitive nerves. This question of unnecessary noise has begun to attract the attention of the public, but much remains to be done in the way of municipal legislation before we can hope to rejoice in peaceable nights. Large numbers of cats and dogs will have to be suppressed or rendered aphonic, the abuse of musical instruments will have to be checked, and drunken roysterers will have to be made to understand that the street is not the place for cacophonous manifestations. The open window will never become as popular as it should be until more attention is paid to this wanton disturbance of the night's repose, and it may be anticipated that the public will become more and more intolerant of these "aids to insomnia."

Ichthyol in Rheumatism.

LOOKING over a well-known book on therapeutics we alighted on the article "Rheumatism," and finding a long list of remedies for the disease in its many forms, we were tempted to tot up the number of remedies for this very common disease. We found they numbered 147, yet the list did not include ichthyol. And, as Dr. Post writes very favourably of the drug, we see no reason why it should not be added to the already long list. He uses it as a local application to swollen, tender, and painful joints. Having given a brisk cathartic with full doses of the salicylate of sodium, he paints the joints with pure ichthyol, and then covers them with oiled silk. This coating is renewed every eight hours until the joint can be freely moved without causing pain. In one case an elderly woman suffering from chronic rheumatism of the hip-joint so severe as to necessitate the patient to keep her couch, a fifty per cent. of ichthyol ointment well rubbed over the trochanters night and morning together with two drop doses of ichthyol in glycerine and peppermint water after meals, so far benefited the patient that she was able to walk about the house, and in fine weather to go out of doors. The drug is an ill-smelling one, and when given internally is usually, if not always, followed by unpleasant eructations; withal a patient suffering from chronic rheumatic arthritis of the hip-joint will be thankful for any drug that brings relief, and ichthyol is worth trying.

Dangers of Picric Acid as a Surgical Dressing.

IT is one of the disadvantages of fancy titles for chemical products that they give no clue to their chemical composition. The name picric acid is of this description. Under the classical designation, cartazotia, the prescriber learned somewhat of its composition, and did not prescribe it indiscriminately for all surgical wounds; the name told of toxic, if not lethal, properties. These toxic properties of the acid were well marked in a case recorded by M. Manseau, in which he applied one per cent. solution of picric acid to an extensive scald in a child. Marked symptoms of poisoning arose, while the urine gave the characteristic reaction for the acid. On discontinuing the acid, all the toxic symptoms disappeared.

The Irish Medical Schools' and Graduates' Association.

The Autumn Dinner of the Irish Medical Schools' and Graduates' Association will be held at the Hotel Cecil this (Wednesday) evening, when Earl and Countess Roberts will honour the Association by their presence. Tickets may be obtained by members from the Hon. Secretary, J. H. Swanton, 40, Harley Street, W. The usual meeting will take place in the afternoon preceding the dinner.

King's College.

It is announced that a Bill will be brought in next Session to abolish religious tests as a qualification as a member of the College, and for the holding of any office under the same, except the Professorship of Theology.

PERSONAL.

Dr. C. O'Brien Harding has been elected Mayor of Eastbourne.

Professor Koch is about to visit South Africa for the purpose of investigating the prevalence of cattle disease.

Mr. E. E. Glynn, M.B.Cantab., L.R.C.P., has been elected Assistant Physician to the Royal Infirmary, Liverpool.

Dr. J. A. Lawson has been accorded a grant of £500 from the Government of Hong Kong on his retirement, owing to ill-health, from service.

Mr. W. Watson Cheyne, F.R.S., will preside at the Annual Dinner of the Harveian Society, which is to take place at the Café Monico on December 11th.

Dr. Louis C. Parkes, Medical Officer of Health for Chelsea, will open a discussion on "Drain Testing" at a meeting of the Sanitary Institute (Parkes Museum) on December 10th.

Dr. Sydney A. Monckton Copeman, of the Local Government Board, has been awarded the Buchanan Medal for his experimental investigations into the bacteriology and comparative pathology of vaccination.

Mr. C. R. C. Lyster, formerly Medical Superintendent of the Bolingbroke Hospital, has been appointed to the newly-created office of Medical Officer to the Finsen Light and X-ray Department of the Middlesex Hospital.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

SCOTLAND.

[FROM OUR OWN CORRESPONDENTS.]

Resignation of the Principal of Edinburgh University.—At a meeting of the University Court on November 17th, Sir William Muir intimated his resignation of the Principalship, on the ground that, after his late illness, he no longer felt equal to the duties which he had for so long had the privilege and honour of discharging, not only with pleasure and profit to himself, but also in the enjoyment of kindly fellowship with all the Professors and friends of the Court and Senatus. With these it had been his privilege to have been long associated, and above all, with the old University itself, with which, including a season of student life, it had been his happy lot to be associated for nearly a score of years, and from which he could not now part without sincere sorrow and affectionate regret. The Court accepted the resignation, to take effect as from the appointment of a successor, and instructed the secretary to communicate with the curators, in whose hands (and not, as in the case of the other Scottish Universities, with the Crown) the appointment lies. The curators consist of Dr. Heron Watson, Lord Stormonth-Darling, Colonel Forbes Mackay, Sir Andrew Macdonald, the Lord Provost and Treasurer Cranston. Sir William Muir was born in 1819, was educated at Kilmarnock, and Edinburgh and Glasgow Universities, and, after attending the East India Company's College at Haileybury, proceeded to India in 1837. There he was promoted to be Collector at Futtehpore in 1843, and ten years later became Secretary to the Governor of the N.W. Provinces. He was one of those shut up in Agra fort during the Mutiny, and subsequently joined Lord Canning as Secretary at Allahabad, and became member of the Legislative Council and Foreign Secretary to the Government of India. He then became in succession, member of the Governor-General's Council, Lieutenant-Governor of the N.W. Provinces, and Chancellor of the Indian Exchequer. On retiring from the service he retained an active connection with Indian affairs until 1885, by becoming a member of the Indian Council in London, a position which he then resigned on being appointed Principal of the University of Edinburgh. In addition to his great administrative capacity Sir William Muir possesses a considerable reputation among Oriental scholars as the author of a "Life of Mahomet," a "History of the Caliphate," and a work on the Koran.

Notification of Phthisis.—As an outcome of the circular requesting the co-operation of the medical profession in the voluntary notification of phthisis issued some weeks ago by the Medical Officer of Health for Edinburgh, a special meeting of the Medico-Chirurgical Society was held to consider the matter. A paper on the subject was read by Dr. Henry Littlejohn, and discussed by the convener of the Public Health Committee, Dr. Leslie Mackenzie, Medical Adviser to the Local Government Board, Dr. Lawson, Dr. Philip, and Dr. Gulland. A resolution in favour of compulsory notification was adopted.

Gift to the Royal Infirmary, Edinburgh.—Professor Chiene has presented an interesting relic to this institution. It is an old student's hospital ticket, dated 1768. The ticket, which has the name of Professor Goodser's grandfather on it, is printed on the back of an old playing card, the ten of clubs.

MANCHESTER.

[FROM OUR OWN CORRESPONDENTS.]

The Central Midwives Board.—The nomination of Professor W. J. Sinclair to the Central Midwives Board has caused great satisfaction in this district. Being nominated by the Lord President of the Council, Dr. Sinclair's position on the Board will be one of great independence and freedom of action—more so than those of his colleagues who represent the Royal College of Physicians and Surgeons, the Society of Apothecaries, and the Incorporated Midwives Institute. Medical readers will remember that no man has suffered in the past more misrepresentation and abuse at the hands of the anti-midwives party than has Dr. Sinclair. There is therefore an element of poetic justice in the Lord President's nomination of his medical representative.

Lancashire, with its colossal working-class population, is perhaps the part of all England where there will be in the future the greatest need and scope for the work of well-trained midwives. It is well, therefore, that the Central Midwives Board should have at its disposal full and accurate information as to the conditions of medical work in this district. This is made doubly secure by the presence on the Board, together with our present Professor of Obstetrics, of Dr. C. J. Cullingworth, who, of course, is also a Manchester man.

It is perhaps permissible to remark that, while better than nothing at all, the Midwives Bill is by no means a strong or a very good instrument to work with. We should go so far as to say that its success or its practical failure will depend entirely upon the skill, judgment, and firmness with which the Board does its work. The framing of regulations for the working of the Bill will demand strenuous work from brains of the highest order. The brains are forthcoming, but the owners are busy people, and many sacrifices will be necessary on their part, more especially during the earlier portion of their work. It is to be hoped that their efforts will not be hampered by premature criticism and unmerited abuse.

BELFAST.

[FROM OUR OWN CORRESPONDENT.]

Students' Reception for Sir Wm. Whitla.—On Saturday evening, the 22nd, a very successful smoking concert was given in the Great Hall of the Students' Union, Queen's College, in honour of Sir Wm. Whitla. The students of the college, with Professor Symington as their chairman, acted as hosts, and the guests included the professors of the college and the medical men connected with the various teaching hospitals of the city, who, with very few exceptions, were present to do honour to their colleague.

Professor Symington proposed the health of the guest of the evening in a brief and humorous speech, in which he remarked that though formal resolutions and addresses of congratulation might do for municipal bodies or college councils, students believed in something more personal, and liked to express their good feelings face to face. The toast was honoured with cheers that shook the building, and Sir William Whitla responded in a graceful and warm-hearted speech. In the course of it he said that frontal convolutions, trained to study the virtues of scammony and aloes, were at a loss when called on for such duties as were imposed on them that evening, and that there was risk that the very warm reception he had been accorded, instead of stimulating them to a great effort, might produce the effect which an over-stimulus sometimes did, namely, paralysis of their functions. A capital programme of music was given in an atmosphere pleasantly redolent of the fumes of tobacco and coffee.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

THE TREATMENT OF CHRONIC INVERSION OF THE UTERUS.

To the Editor of The Medical Press and Circular.

Sir,—I listened to the interesting paper and subsequent discussion on Mr. John Taylor's case of above at meeting of Obstetrical Society, October 1st. Dr. Heywood Smith spoke of manual compression of the organ, and this reminded me of a plan I am tempted to describe, adopted by myself in a case of the kind I met with several years ago, in the hope that others, having more opportunity of treating such cases, may be induced to give my plan a trial before adopting more heroic measures.

I was told the patient had suffered for eight years and had been seen by several medical men, and had (she informed me herself) been at Aberystwyth Hospital, where efforts had been made to cure her without success. Indeed, she strongly objected to any interference or examination, and it speaks well for the persuasive powers of an Irishman to be able to state she at length consented to my examining her, but only on the condition that she should be anæsthetised. Having had her placed under chloroform, I found the case one of chronic inversion, and made efforts by manipulation and pressure combined, with scarification and hot stuping of the uterus (water hot as my hand could bear), to reduce the inversion, but failed.

However, having observed some retraction and shrinking, and having no repositor at hand, it struck me to treat the case like one of "paraphimosis," and, having procured some narrow flat rubber tape, I encircled the uterus from below up, and fastened off less tightly at constriction. I then allowed patient to recover from anæsthetic and inserted a grain morphia suppository, and, having seen that all was right, left her till next day, when I found the protrusion much smaller (the patient complaining of pain again, as the effects of morphia had passed off). I unwound the rubber band and reapplied it, inserted another suppository, and that evening I had the satisfaction of being able to replace the uterus. I may add manual pressure was made at either corner alternately, and as one side yielded I made pressure on opposite side, and so, by zig-zag movements, the whole organ slipped up suddenly with a jerk.

The patient recovered completely, and instead of being obliged each day to sit on a commode with blankets round her limbs from morning till night (as she assured me she had done for several years), she conceived and bore a son, which fact I was quite unaware of, having left the district (North Wales), but the vicar of the town kindly wrote informing me, and congratulating me, as he had taken a great interest in her case for years. I imagine the treatment I have endeavoured to describe might deserve a trial in these uncommon cases, as, so far as I can discover, it is original.

I am, Sir, yours truly,
Alexander Duke.

THE PORTRAITS OF MEDICAL MEN.

To the Editor of The Medical Press and Circular.

Sir,—Change in the methods of portraiture and decay in the products of the engraver and lithographer, and forgetfulness, and worse, on the part of many moderns, are robbing us of the ancient representations of medical worthies of a bygone time. A generation that neglects to honour its ancestors is likely to be speedily forgotten by its progeny. I think there must be many prints, photographs, or engravings of those who have laboured long and well in the making of medicine stowed away in old portfolios or lying in forgotten corners. Before such have altogether passed beyond our reach it would be well if serious effort could be made to save them from destruction. I venture to think that our various hospitals and medical schools might wisely assist in securing the protection of all portraits and interesting relics linking us to the distinguished practitioners of the past,

Yours faithfully, T. N. K.

"THE ALCOHOLISATION OF WOMEN."

To the Editor of The Medical Press and Circular.

Sir,—Is it at all proved that abuse of alcoholic drinks is on the increase among women of any class? I, for one, seriously doubt the statement; and my doubt is based, not only upon sufficiently close observation for many years of female patients of the better classes, but upon social intercourse, with eyes open, among these classes. The signs of chronic alcoholism are nowhere more easily to be detected by the experienced eye and nose than in the mouth and breath. The mucous membrane of the mouth of those who take alcohol to excess always assumes a characteristic appearance, whilst the odour of the breath is in most cases unmistakable. As a specialist whose patients are mostly women, I fail to find anything like the number of suspicious cases nowadays that were recognisable twenty-five years ago. Socially, my experience has been in late years that more and more women abstain from wine at dinner, and very rarely indeed do I notice (although, I repeat, my eyes are open) a woman to whom wine seems an irresistible temptation. Certainly there is less drinking among men above a certain class; and, if fathers and brothers drink less, why should we suspect mothers and daughters to drink more? A higher standard of health than ever prevails among the majority of women to-day, thanks to the athleticism with which they are imbued as girls, and which they do not, in most cases, altogether neglect as women. I venture to affirm that if you, Sir, would issue to your subscribers and readers a few questions as to their experiences and opinions on the subject, you would find an overwhelming majority to agree with the view which I have here expressed.

I am, Sir, yours truly,

Nov. 21, 1902. H. S.

Literature.

ROSE AND CARLESS'S MANUAL OF SURGERY. (a)

It literally speaks volumes for the progress of surgery at the present day that although this, the fifth edition, comes to us within twelve months of the fourth, considerable modifications have been found necessary to bring the work up to date and to fit it more satisfactorily to modern requirements. Part of the change savours of a mere shuffling of the cards, as, for instance, the relegation of the phenomena of inflammation and its treatment to a back seat, in order to give precedence to bacteriology, the youngest and most self-assertive of the sciences germane to medicine, and the principles of antiseptic surgery.

This departure from time-honoured precedent is, however, not without its special significance. We all feel proud the day we are admitted by the front door instead of passing down the area steps, for it is an indication that we have risen in social status. Bacteriology, as a young, living science, long regarded askance, might, had it a biological existence, experience similar satisfaction. The change in short, is an "act of notoriety" which proclaims the greater importance of understanding the etiology of inflammation over its mere manifestations. Seeing that antisepsis has for many years been the foundation stone of surgery, it is only meet that its principles and application should be accorded a place of honour in all treatises dealing with that art.

On looking through this edition we find that the other changes do not embody any particular innovation of epoch-marking interest, though they "lead to a more harmonious pathological and clinical picture than was previously presented"—but that is saying a good deal in view of the fact that the literary and technical excellence of its predecessors was such as to almost sweep the field of rivals, thereby securing a popularity quite phenomenal in extent and degree.

Radiography *vel* skiagraphy has revolutionised certain branches of surgery by rendering internal injuries, such as fractures and dislocations, as easy of diagnosis as a laceration of the integument. It also enables us to see for ourselves whether, after reduction, the position of the fractured or displaced surfaces are in perfect apposition. The value of the method is demonstrated by a series of admirable skiagrams, lent by Messrs. Allen and Hanbury, which show to what perfection this neo-photographic development has attained.

In a fifth edition one hardly expects to discover many opportunities to exercise the critical function. There are, here and there, minor points to which one might take exception. For instance, in the treatment of furuncles it seems to be assumed that the local inflammation must necessarily go on to suppuration, and poulticing is practically the only measure suggested. Practitioners know, however, that they can be aborted early by timely incision and the application of pure carbolic acid. Then, too, the authors have re-edited an ancient and obsolete objection to Junker's inhaler for chloroform, viz., that it is possible to pump the liquid chloroform through the efferent tube by accident. As a matter of fact this was rendered impossible years ago by a simple contrivance with which every apparatus has since been provided. We could have wished, too, that the authors had emphasised the importance of employing this apparatus more generally for the induction of anæsthesia, since it is unquestionably more rational and safer than the mask or towel, *pace* the Scotch school of anæsthetists.

It only remains for us to congratulate the authors on the general excellence of a work which seems likely to be *the* text-book for many years to come. The volume is admirably printed and solidly bound, and it can be opened wide without eliciting the ominous crack which so often heralds partial destruction in books of this portly size—for it runs into upwards of 1,200 pages.

COLBECK ON PRESCRIBING. (a)

If this little work answers its purpose of assisting the student and practitioner in the practical application of drugs in the treatment of disease it will be doing something towards remedying a regretable lapsus in medical education. The growing habit of using ready-made combinations of drugs is probably not the cause, but the result, of a system of medical training which relegates pharmacy, materia medica, and applied therapeutics to the background.

After the chapters on prescription-writing, incompatibility and methods of administration, we come to the application of the methods of prescribing for diseases of the various systems—digestive, cardio-vascular, respiratory, &c. Under each head model formulæ are given for the relief of the prominent symptoms and, so far as they go, they are unexceptionable, but they leave the impression that our therapeutical resources are, after all, very limited, the changes being rung on a comparatively small number of drugs. We look in vain for any ingenious combinations outside the beaten track, but, on the other hand, the authors do not pretend to do more than guide the uncertain hand of the tyro, so that we are perhaps not entitled to expect more than they have given us.

The practical value of the work would be greatly enhanced by a more copious index. A means might easily be devised to enable a reader who wishes to prescribe, let us say arsenic and iron, or iron and a vegetable bitter, to refer forthwith to a model prescription containing this or that association of drugs. As a matter of fact, there is no index reference to drugs at all. This is a defect which might easily be remedied in a future edition. An attempt might also be made to break away from bismuth and soda for indigestion, ipecacuanha and paregoric for cough, and the many other venerable formulæ, in favour of equally "model" if less hackneyed associations.

STELWAGON ON SKIN DISEASES. (b)

It cannot be said that there is any lack of treatises on diseases of the skin by English authors, yet this one by an American dermatologist will doubtless be welcomed by many, not only on account of the comprehensiveness of the information conveyed in the text, but also, especially, for the sake of the numerous coloured plates, which are of unusual excellence and finish. There are twenty-six full-page lithographic and half-tone plates, and no less than 220 illustrations in the text. This wealth of illustration in a work treating of diseases of the skin is especially welcome, because the most careful and detailed descriptions inevitably fail, in many instances, to convey a clear clinical idea of the lesions which can only be understood when seen.

Special attention has been given to the diagnosis of the various cutaneous affections, and the author may be allowed to have achieved all that word-painting can do with the object of facilitating the task. In the matter of treatment it is decidedly a satisfactory feature that the author is careful to point out not only what, in a general way, is to be prescribed, but, whenever possible, to give definite directions as to selection and method.

This is not the place to challenge the author's views on certain questions of classification and nomenclature, although there are sundry points which invite discussion.

(a) "A Manual of Surgery for Students and Practitioners." By William Rose, M.B., B.S.Lond., F.R.C.S., Professor of Clinical Surgery in King's College, London, and Senior Surgeon to King's College Hospital, &c., and Albert Carless, M.S.Lond., F.R.C.S., Surgeon to King's College Hospital and Teacher of Operative Surgery in King's College, London, &c. Fifth Edition. Price 21s. net. London: Baillière, Tindall and Cox. 1909.

(a) "The Science and Art of Prescribing." By E. H. Colbeck, B.A., M.D.Cantab., F.R.C.S.Lond., and Arnold Chaplin, B.A. M.D.Cantab., M.R.C.P.Lond. Price 5s. net. London: Henry Kimpton. 1902.

(b) Treatise on Diseases of the Skin." By Henry W. Stelwagon, M.D., Ph.D., Clinical Professor of Dermatology in the Jefferson Medical College and Woman's Medical College, Philadelphia, &c., &c. B. Saunders and Co. 1902.

The work is provided with a very copious index, which even goes so far as to give the French and, in some cases, the German equivalents for the diseases. This fact affords an indication of the care and thoroughness with which the work has been carried through.

LITERARY NOTES.—We understand that Mrs. Alec Tweedie is bringing out a new and cheaper edition of the very charming memoir of her father, "George Harley, F.R.S., or, the Life of a London Physician."

THOSE medical men who are seeking admission to the Bar, will be interested to read the article in the current number of the *Cornhill*, on "Prospects in the Professions." It has become somewhat of a fashion among a certain class of medical specialists to seek rank as a barrister-at-law. The article to which we have referred indicates that it is as hard to succeed in the profession as it is easy to enter it.

Medical News.

The Action Against the Apollinaris Company.

THE proceedings instituted against the Apollinaris Company for falsely describing the water as "natural mineral water" ended in the case being dismissed by the magistrate on the ground that there was no legal definition of what constituted a natural mineral water, especially in view of the fact that in the case before him there was no addition of a foreign substance in the fair sense of the term. From a common-sense point of view, manipulations which have for object merely to ensure the preservation and the dietetic excellence of the article would not appear to confer the description of "artificial."

Death from Pyæmia.

MR. M. WOOD, M.R.C.S., who was acting as *locum tenens* at the Huntingdon County Hospital in consequence of the incapacity of the resident medical officer from septic poisoning of the hand contracted in the course of a post-mortem examination, himself contracted septic infection, to which he succumbed after a few days' illness.

Another Hospital Fire.

AN outbreak of fire occurred on Friday evening last in the laundry of the Royal Free Hospital, Gray's Inn Road, and for a time great alarm prevailed, but it was ultimately extinguished before it had spread to the wards.

Dublin Death-rate.

THE deaths registered in the Dublin registration area for the week ending Saturday, November 15th, 1902, represent an annual rate of mortality of 27·8 in every 1,000 of the population. They included 26 deaths from tuberculous disease: 14 from diseases of the nervous system; 39 from diseases of the circulatory system; and 37 deaths from diseases of the respiratory system; 72 children died during the week, of whom 41 were under one year old. In Clarence Street North District the death-rate was 38·6; in Summer Hill District 39·2; in Lisburn Street District 46·8; and in Blackhall Place District 37·9 in every 1,000 of its population.

Death from Chloroform.

AN inquest was held last week on a miner who had died under chloroform, administered for the fourth or fifth time, at the General Hospital, Wolverhampton. Death could not very well be attributed to idiosyncrasy, since the deceased had previously taken it well, so a verdict of death from cardiac failure was returned.

West Norfolk and Lynn Hospital

A NEW operating theatre being required for the West Norfolk and Lynn Hospital, the King has headed the list of subscriptions with 100 guineas, the Queen contributing £100, and the Earl of Leicester (Lord Lieutenant of Norfolk) a similar amount.

Dublin University Biological Society.

ON Thursday, the 27th inst., the opening meeting of this Society will be held in the Front Hall. The president will read the inaugural address, his subject being "Tuberculosis: Its Relation to Public Health." The chair will be taken at 8.15 p.m., by Dr. R. Travers Smith, and the speakers will include Sir John Wm. Moore, M.D., and Sir Thomas Pile, Bart.

Mr. Allinson as an Anti-Vaccinator.

DETERMINED not to miss any opportunity of cultivating the notoriety which is a poor substitute for fame, Mr. Allinson, ex-L.R.C.P., applied for, and obtained, a certificate of exemption from vaccination for his child. He based his application on the "fact" (!) that when engaged as an assistant public vaccinator he "saw any amount of injury, and even a good many deaths." As all this injury and death was presumably of his own doing, Mr. Allinson must bear the responsibility and not seek to burden the operation with powers for mischief, which have certainly not been discovered in the hands of others. Mr. Allinson particularly resented having to pay one shilling for the certificate, but he paid it after some grumbling.

Guy's Hospital War Memorial.

THE Guy's Hospital South African Memorial Committee is anxious that none of the names of Guy's students who lost their lives in the war should be missing from the record on the memorial, which is to take the form of a drinking-fountain in the colonnade, from a design by Mr. Frederick Wheeler, F.R.I.B.A. Dr. Frederick Taylor, the senior physician, will be glad to hear from any of our readers who can assist in the completion of the record.

◆

Pass Lists.

Royal College of Surgeons, Ireland.

THE following candidates have passed the Primary part of the Fellowship examination:—Miss A. M. Barry, Miss E. J. Jellett, Miss J. C. Hargrave, Miss T. E. Harrison, Mr. G. A. D. Harvey, Miss I. G. Ovenden, and Mr. J. Parker.

The following candidates having passed the Final examination, have been admitted Fellows of the College:—Mr. F. J. C. Heaney, Mr. C. F. Marks, Mr. G. S. L'Estrange, Miss M. S. P. Strangman, and Miss M. Thom.

Trinity College, Dublin.—Michaelmas, 1902.

THE following gentlemen have passed the Final Examination in Surgery:—John H. Torney, Thompson F. Wilson, Maurice FitzGibbon, Charles A. Stone, Anthony H. Corley, James M'Cutcheon, William P. Ringland, Thomas W. Crowley, William Leggett, James E. Johnstone, Henry B. Kelly, Nicholas M. Cummins, Charles Rolleston.

B.Ch. Degree.—Henry A. Hanan.

Society of Apothecaries of London.

THE following candidates passed in:—

Surgery.—A. E. Bird (Sections I. and II.), G. M. Crockett (Sections I. and II.), B. M. Dunstan (Section II.), L. Ettinger, G. R. Hannon, R. J. O. Harley, L. J. A. Marry, J. P. Nettell (Section I.).

Medicine.—A. E. Bird (Section I.), T. S. Davies, H. B. Drake (Section I.), O. Gutermann, R. J. O. Harley, W. Martin (Section I. and II.), L. J. A. Marry, C. C. Rushton (Section I).

Forensic Medicine.—F. G. Bennett, A. E. Bird, H. B. Drake, L. Ettinger, I. Griffith, O. Gutermann, W. Martin, L. J. A. Marry, C. C. Rushton, L. S. Shoosmith.

Midwifery.—J. Bromley, J. D. Keir, L. H. Lewis, G. Lucas, L. J. A. Marry, E. H. Price, H. Smith.

The diploma of the Society was granted to the following candidates, entitling them to practice Medicine, Surgery, and Midwifery:—F. G. Bennett, I. Griffith, and L. J. A. Marry.

Notices to Correspondents, Short Letters, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

WE are requested by a subscriber to solicit support on behalf of the candidature of Robert Kirkpatrick MacRoberts, aged nine, son of the late William Kirkpatrick MacRoberts, M.B., M.Ch., &c., formerly practising at Burton-on-Trent, and late of New South Wales, where he was appointed Physician in charge of the Wentworth Hospital, and Medical Officer of Health for the Central District. Dr. Kirkpatrick was killed by a fall from his horse on his way to visit a patient, leaving his wife and three children unprovided for. The candidature is endorsed by the Archbishop of Dublin, Earl Roberts, the Right Hon. C. T. Ritchie, Prof. C. B. Ball, Dr. John William Moore, of the University of Dublin, &c. The case appears to be one deserving of sympathy and support, and we have pleasure in bringing it to the notice of our readers in view of the 1903 election.

MESSRS. FAIRCHILD BROS. and FOSTER, of New York, the manufacturers of the well-known series of digestive ferments and preparations, have produced for the use of practitioners two little booklets which cannot fail to be found useful. One contains recipes for the preparation of peptonised foods by the "Fairchild" process; the other a series of "diet slips," conveniently arranged for immediate reference, giving directions for the alimentation of patients suffering from the commoner complaints. The digestive products of this firm are too well known to medical men for it to be necessary to mention them in detail.

A DUTCH DEATH NOTICE.

ON the 28th inst., Amy Jane Mary Smit, eldest daughter of John and William Smit, aged 1 day 2¼ hours. The bereaved and heartbroken parents beg to tender their hearty thanks to Dr. Jones for his unremitting attention during the illness of the deceased, and for the moderate brevity of his bill. Also to Mrs. Williams for the loan of clean sheets, to Mr. Wilson for running for the doctor, and to Mr. Robinson for recommending mustard plaster.—*Krugersdorp Sentinel.*

UBIQUE.—The presence of a third person at an interview of the kind is absolutely necessary, in order that there may be confirmatory evidence of the statements made.

UNNECESSARY CANDOUR.

A CASE in which honesty is not the best policy, suggests a ribald contemporary, was that in which a medical man, in filling up a certificate of death, entered his name in the space allotted to the cause of death.

THE CLINICAL THERMOMETER.

CURRIE, of Edinburgh, employed a thermometer in the treatment of typhoid fever patients with the cold douche as early as 1797. He was ridiculed by his German contemporaries as an instance of medical decay in English medicine. The first clinical application of the thermometer was made by Santorius, of Padua. He invented a thermometer open at the end. After being held by the patient it was plunged into cold water. Boerhaave taught the importance of the thermometer. De Haen—1704 to 1776—must be given the honour of introducing the thermometer into current use at the bedside. It was not until 1850 to 1870 that it came into general use.

Meetings of the Societies, &c.

LONDON.

WEDNESDAY, NOVEMBER 26TH.

DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND (20, Hanover Square, W.).—5 p.m. Dr. J. H. Stowers: Presidential Address.

HUNTERIAN SOCIETY (London Institution, Finsbury Circus, E.C.).—8.30 p.m. Pathological Evening.

THURSDAY, NOVEMBER 27TH.

CHILDHOOD SOCIETY (Library of the Sanitary Institute, Margaret Street, W.).—8 p.m. Lantern Lecture: Mr. C. F. F. Campbell. The Practical Training of the Blind as carried on at the Royal Normal College for the Blind, Upper Norwood, S.E.

HARVEIAN SOCIETY OF LONDON (Café Monico).—6.30 for 7 p.m. Harveian Dinner.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies Street, W.C.).—4 p.m. Dr. Seymour Taylor: Enteric Fever.

FRIDAY, NOVEMBER 28TH.

CLINICAL SOCIETY OF LONDON (20, Hanover Square, W.).—8.30 p.m. Papers: Mr. A. W. Mayo Robson: Ruptured Crucial Ligaments and their Repair by Operation.—Lieutenant-Colonel W. K. Hatch, I.M.S.: On Hepatic Abscess.—Mr. L. H. McGavin: A Case of Strangulated Inguinal Hernia in which Reduction *en masse* was caused by the Employment of Taxis.

TUESDAY, DECEMBER 2ND.

WESTMINSTER HOSPITAL (Broad Sanctuary, S.W.).—Dr. de Havilland Hall: Medical Cases. (Post-Graduate Clinical Demonstrations).

THURSDAY, DECEMBER 4TH.

RONTGEN SOCIETY (20, Hanover Square, W.).—8.30 p.m. Ordinary General Meeting. Dr. D. Walsh: An Observation Bearing upon the Therapeutic Action of the Focus Tube.—Mr. Stephen Mayou, F.R.C.S.: Paper.—X Rays in Ophthalmic Work, with lantern slides.—Mr. Isenthal: The Nodon Electric Valve for Converting Alternating into Continuous Current.

DUBLIN.

FRIDAY, NOVEMBER 28TH.

ROYAL ACADEMY OF MEDICINE IN IRELAND.—Obstetric Section—Exhibits by Card:—Dr. Smyly: (1) Three uteri removed for Myomata; (2) Uterus removed for Cancer; (3) Tubes removed for Tubercle. Dr. A. Smith: (1) Omental Tumour simulating an Ovarian Cyst; (2) Ruptured Tube (ectopic gestation); (3) Double Pyosalpinx, with large Ovarian Abscess Sac; (4) Broad Ligament Fibroid: (5) Typical Specimens of Ovarian Cystomata. Dr. Elena: Sarcoma of Ovary. Specimens:—Dr. E. H. Tweedy: (1) Tubal Pregnancy; (2) Ovarian Cyst and Pyosalpinx; (3) Salpingitis: two cases. Papers:—Dr. F. H. Tweedy: Tubal Disease; an analysis of four cases. Dr. Knott: A Case of Amenorrhœa. Drs. Neill and McWeeney: A Case of Eclampsia.

Appointments.

CORCORAN, THOMAS, L.R.C.S.I., L.A.H.Dub., reappointed Medical Officer of Health to the Loughborough Rural District Council.

DOWDING, A. W. WOODMAN, M.D., M.S.Durh., M.R.C.P.Edin.: M.R.C.S., L.S.A., Medical Officer for the Newlyn East District by the St. Columb (Cornwall) Board of Guardians.

GLYNN, E. E., M.B.Cantab., L.R.C.P., Assistant Physician at the Royal Infirmary, Liverpool.

HARSANT, WILLIAM HENRY, F.R.C.S.Eng., L.S.A., Honorary Consulting Surgeon to the Bristol Royal Infirmary.

IRVINE, R. C., M.B., Ch.B.Edin., House Physician to the David Lewis Northern Hospital, Liverpool.

JOHNSON, J. A., M.B., Ch.B.Vict., Assistant House Surgeon to the David Lewis Northern Hospital, Liverpool.

JOYNES, FRANCIS JAMES, M.R.C.S., L.S.A., Medical Officer of Health for the Dursley (Gloucestershire) Rural District Council.

MACKENZIE, F. S., M.B., Ch.B.Edin., House Surgeon to the David Lewis Northern Hospital, Liverpool.

MATHEWSON, JOHN, M.B., B.Ch., R.U.I., appointed District Medical Officer of the Bromley Union.

MOORE, STANLEY, L.R.Q.C.P.I., Certifying Surgeon under the Factory Act for the Maynooth District of the County of Kildare.

PITT, C. W., M.R.C.S., L.S.A., Medical Officer of Health for Malmesbury.

SCOTT, FRANCIS, M.R.C.S. and L.M.Eng., L.S.A., Public Vaccinator for the Tintern District by the Chepstow Board of Guardians.

STABB, A. F., M.B.Cantab., University Lecturer in Midwifery.

TICKELL, HENRY MAURICE, M.A., M.D., B.C.Cantab., M.R.C.S., Assistant Physician at Nordrach Sanatorium (Baden, Black Forest).

Vacancies.

Barnhill Poorhouse and Hospital.—Medical Officers (Two Male Assistants). Salary £90 to £100 per annum, with board, apartments, &c. Applications to Jas. R. Motion, Inspector and Clerk, Parish Council Chambers, 266, George Street, Glasgow.

Beverley Dispensary and Hospital.—Medical Officer and Dispenser (non-resident). Salary £160 per annum. Applications to C. J. Arden, Clerk.

Bradford Royal Infirmary.—House Surgeon. Salary £100 per annum, with board and residence. Applications to William Maw, Secretary.

County Asylum, Dorchester.—Second Assistant Medical Officer. Salary £140 and all found. Applications to the Medical Superintendent.

Dewsbury and District General Infirmary.—House Surgeon. Salary £100 per annum with board, residence, and washing. Applications to Charles J. Abbs, Secretary, Infirmary, Dewsbury.

Hospital for Sick Children, Great Ormond Street, London, W.C. Resident Medical Superintendent. Salary 100 guineas per annum, with board and residence in the hospital and £5 washing allowance. Applications to the Secretary.

London County Council.—Coroner for the South-Eastern District of the County of London. Salary £900. Applications to G. L. Gomme, Clerk of the Council.

London Hospital, Whitechapel, E.—Medical Registrarship. Salary £100 per annum. Applications to G. Q. Roberts.

Middlesbrough County Borough Asylum, Marton-in-Cleveland, Yorkshire.—Assistant Medical Officer. Salary £130 per annum, with furnished apartments, board, and washing. Applications to the Medical Superintendent.

New Ross Union, Carrigbyrne Dispensary District.—Medical Officer. Salary £125 per annum, together with the usual Vaccination Fees. Applications to P. A. Pope, Clerk of the Union.

Royal Hospital for Incurables, Donnybrook, Dublin.—Resident Medical Officer. Salary £120 per annum, with board and furnished apartments. Applications to John J. Thompson. (See advt.)

St. George's Hospital Medical School.—Secretary. Salary £150, with emoluments. Applications to the Dean.

Birth.

HASSALL.—On Nov. 19th, at Headingley House, Knutsford, the wife of John M. Hassall, M.D., of a daughter.

Deaths.

OLDHAM.—On Nov. 19th, at his residence, Cannington, Boscombe, Bournemouth, Henry Oldham, M.D., F.R.C.P., in his 88th year.

PRIOR.—On Nov. 18th, at 4, Goldington Road, Bedford, Amelia, the beloved wife of Charles Edward Prior, M.D., aged 77 years.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, DECEMBER 3, 1902. No. 23.

Original Communications.

SENILE CATARACT AND ITS TREATMENT. (a)

BY A. MAITLAND RAMSAY, M.D.,

Fellow of the Faculty of Physicians and Surgeons, Glasgow; Surgeon to the Glasgow Ophthalmic Institution; Professor of Ophthalmology in St. Mungo's College, Glasgow; and Lecturer on Diseases of the Eye in Queen Margaret College, University of Glasgow.

CATARACT, in medical acceptance, denotes an opacity of the crystalline lens or of its capsule, and this implies a classification of cataracts into lenticular and capsular, and a further subdivision of the former group into nuclear and cortical. Since the opacity must be in the lens, in its capsule or in both, this anatomical division has the advantage of including all forms of the disease, but clinically it has been found more convenient to refer to cataracts as hard, soft, or fluid; as white, amber, or black: as congenital, juvenile, or senile; as primary or secondary; as progressive or stationary; as mature or immature.

All forms of cataract depend upon three main factors—the anatomical position of the opacity, the age of the patient, and the condition of the eye. From the time of birth till about the age of thirty all lenticular opacities are cortical and soft: but after the third decade of life, the nucleus has developed so far that it acquires a predominating influence over both the consistency and the character of a cataract, while after the sixtieth year the lens becomes so hard that the cataract is spoken of as nuclear and senile. Under ordinary circumstances, therefore, the development of opacity may be looked upon as an incident due to the advance of years, and except for the loss of transparency in the lens the eye is physiologically sound.

In such a case the cataract is spoken of as primary, in contradistinction to the secondary one which appears in the course of some eye diseases, or after an eye injury. For example ophthalmia neonatorum sometimes leaves on the anterior capsule of the lens an opacity, due to inflammatory changes resulting from a central perforating ulcer of the cornea; or a cataract, characterised by rapid development and by a peculiar whiteness, due to inflammatory thickening of the capsule, may arise in choroiditis or in detachment of the retina; or, lastly, the lens may lose its transparency, and a cataract, secondary to pathological processes in the choroid, arise in high degrees of myopia. This last begins, as a rule, in the posterior pole of the lens, is usually brownish in colour, and takes many years to mature. A cataract is also at times spoken of as secondary to some constitutional disorder, the most familiar example being the opacification of the lens which occurs in the course of diabetes.

It is evident, then, that the subject of cataract is too wide for treatment in one lecture, so my remarks will meanwhile be limited to the diagnosis and treatment of the senile form of the disease. As a result of the advance of years the lens steadily undergoes a process of hardening or sclerosis which gradually increases the size and changes the colour of the nucleus. A lens in this condition possesses in considerable degree the property of reflecting light, and consequently the pupil of an elderly person has rarely the brilliant jet-black appearance presented in youth, but is generally dull and grey. This is what is known as the "senile reflex"; and it must never be confused with cataract, for though the lens is old and hard it has lost none of its transparency. The alteration is so far purely physiological, and it is usually very difficult to determine why in certain cases superadded pathological changes make their appearance and render the lens opaque. At first, after the diseased condition has shown itself, the cataract as a rule develops very slowly: for months and even years it may remain seemingly stationary, and then the opacity may, without any obvious cause, rapidly become complete.

The etiology of cataract cannot be associated with any special disorder of the general health, although, as has been said, the frequency of its occurrence in connection with diabetes mellitus has given rise to the term "Diabetic Cataract." A considerable percentage of cases are associated with albumin in the urine, and with the digestive difficulties and vascular changes which accompany renal cirrhosis. Heredity seems to play an important *role* in the causation, and the disease is often seen in several members of the same family, and can be traced back through successive generations. Senile cataract may occur any time after the fortieth year, although it is far more common in the aged. Statistics prove that certain occupations act as predisposing causes, and the most frequent sufferers are glass-blowers, blacksmiths, and those whose occupations necessitate the exposure of the eyes to strong heat and bright light.

One of the earliest premonitions is when a person who has been using glasses for reading finds that he can dispense with their assistance. Such a one usually puts his spectacles aside gleefully, saying he has got his "second sight," and can read his newspaper perfectly well with the naked eye; but he fails completely to connect this with the fact that he has now difficulty in recognising a friend on the opposite side of the street, and that vision for distant objects is not nearly so keen as formerly. As these changes are due to increased refractive power in the lens, which render the eye myopic, vision for distance may, at first, be improved by the use of concave glasses, but this can only be for a time. Another characteristic symptom is when a person complains that on looking at a bright light, such as the moon or a star, he sees it doubled or quadrupled. This monocular polyopia is also due to changes in the refraction of the lens, and as it causes the patient much annoyance, may lead him to complain of his sight before the slightest trace of cataract can be detected by means of the ophthalmoscope. Where the eyes have been overtaxed at fine work the first symptoms are usually eye-strain, accompanied by hyperæmia of the lids and ocular conjunctiva; and in these cases the patients often complain also of muscæ volitantes, describing the motes as moving with the eye and having at times a resemblance to a cloud of dust or a fine cobweb. The change once begun usually progresses, and as time goes on the transparency of the lens is interfered with more and more, until at length the pupil loses its blackness and becomes occupied by a cataract.

(a) A Post-graduate Lecture delivered in the Glasgow Ophthalmic Institution, November 11th, 1902.

As the opacity in the lens increases, the vision naturally becomes more and more indistinct, and in the final stages of the disease the patient is only able to distinguish light, and is quite unfit to walk about alone. The gait of a person in this condition is very characteristic; he walks slowly as if afraid to step forward, and holds one hand outstretched to feel his way, while with the other he tries to shade his eyes from the light. This attitude should be specially noted, because it is in such marked contrast to that of one who has lost his sight through atrophy of the optic nerves. The latter shows no sign of fear, but walks boldly onward with head and shoulders erect and looking straight in front of him.

The chief objective sign of cataract is the opacity. In the earliest stages this can be recognised only by means of the ophthalmoscope, although as the disease advances towards maturity it becomes quite plain to the naked eye. In all uncomplicated cases the iris presents a normal appearance, the pupils respond actively both to the stimulus of light and in the act of convergence, and the intraocular tension is not increased. A shallow anterior chamber indicates that the lens has become swollen owing to a rapid opacification of its cortex, but as maturity is approached the lens again shrinks and permits the iris to fall back into its natural position so that the aqueous chamber is restored to its normal dimensions.

When one is investigating a case of cataract it is always advisable that the various steps of the examination should be conducted in a definite order. Particular attention should be given to the patient's account of his symptoms, for much may thus be learned of the past history of the eye and the probable duration of the diseased condition, as well as of the state of his general health. The eye should then be examined carefully for any abnormality in the pupil or iris, for inflammation of the conjunctiva or of the edge of the lids, or for any inadequacy of the tear passages. The visual acuity should always be tested, although if the patient be already blind it will be possible to determine only his power of distinguishing and locating a light. The functional activity of the retina may be still further interrogated by gently palpating the sclerotic and noting the presence or absence of phosphenes.

The eye should afterwards be examined by oblique illumination and by the ophthalmoscope, the latter being of special value, as its use enables us, when the pupil is dilated, to detect not only the very beginnings of cataract, but also changes in the fundus oculi, more especially when these are situated in the periphery or in the macular region. Moreover in a case where the sight is dim and the pupil hazy, ophthalmoscopic examination will prevent the terrible blunder of allowing a patient to become hopelessly blind from glaucoma, while an imaginary cataract is supposed to be slowly maturing.

Even when the existence of cataract has been distinctly made out, the surgeon should give a very guarded prognosis as to the length of time it may take to ripen. As a rule the complete opacification of the lens requires from two to three years; but during its passage through the incipient and progressive stages many a cataract remains stationary. This is very often the case where it is complicated by myopia, and in the aged a lenticular opacity may not increase for years. In many cases, indeed, the progress is so slow that the stage of maturity is never reached. One of my patients, a gentleman between seventy and eighty years of age, used to tell me that though he had been informed, twenty years before, that he had cataract in both eyes, and that he would be blind in two years, his sight had never become any worse. To say that a person with a few opaque striæ in the lens is suffering from cataract is no doubt perfectly true, but the use of the word at this early stage is apt to convey a false impression and create much unnecessary alarm. Many a patient would, after hearing such a diagnosis, live in constant dread of the onset of blindness which might never come.

While a cataract may be said to be optically ripe when the vision is reduced so far that the sufferer is unable to distinguish the knife and fork on his dinner plate, it may not then be surgically ripe; and it is important to wait, if possible, for the latter stage before operating, because then the extraction will be more complete. The degree of maturity can always be estimated by sharply illuminating the edge of the pupil and observing the breadth of the shadow cast by the iris. When the whole cortex is opaque the iris lies closely against the cataractous surface, and does not form a shadow when a light is held against the eye. Whenever the anterior chamber has regained its normal depth, and there is no shadow, the cataract is said to be surgically ripe.

A patient suffering from cataract, however, requires help in the early stages. Unfortunately, there is no means known whereby an opaque lens can be rendered transparent, but during the period of waiting till surgical operation becomes possible the sight may be improved by the use of mydriatics if the opacity be central, and of myotics if it be largely peripheral. Many aged persons with nuclear cataracts are enabled to see satisfactorily if they bathe the eyes daily with a very weak solution of atropine. Frequently also concave glasses give relief for a time. All patients should be cautioned against overtaxing the eyes by struggling to see small print, or to do fine needlework, and they should avoid, as far as possible, the exposure of the eyes to bright light and strong heat. In every case attention must be paid to the state of the general health and means taken to ensure the efficient action of bowels, kidneys, and skin, and to maintain nutrition as a whole at the highest possible level. Whenever the patient's sight becomes so defective that he has difficulty in following his usual occupation the question of surgical interference must be considered, and though it is always preferable to delay operation until the cataract is mature a patient ought in no case to be permitted to become blind. When both eyes are equally affected one ought to be operated upon whenever the patient experiences difficulty in carrying on his work. It may then be necessary to perform a ripening operation a few weeks before extraction is attempted. Under such circumstances I am in the habit of making an iridectomy, and then applying massage directly to the capsule of the lens with a small spatula. It is, however, usually quite safe to extract a cataract before the stage of maturity is reached, but as, in that case, a considerable quantity of cortical matter is necessarily left in the eye, the process of healing is apt to be complicated and demands much skill and care on the part of the surgeon. Before any operation is undertaken the field of vision must be carefully tested with a light in order to determine, as far as possible, that there is no atrophy of the optic nerve or detachment of the retina. The presence of either of these lesions would obviously render the operation of no avail in restoring sight. Careful examination must also be made to negative the existence of chronic conjunctivitis, or of blenorrhœa of the tear passages, and in all doubtful cases there should, without fail, be a bacteriological examination of the fluids in the conjunctival sac. If pyogenic micro-organisms are present there is great danger that after operation the eye will be lost from suppuration.

Wherever possible, a patient should be placed in charge of a competent nurse at least forty-eight hours before the time fixed for the operation. He should have a warm bath, put on clean under-clothing, and go to bed. The nurse must report if there be any cough, sickness, or unusual restlessness or nervousness. Early the following morning a purgative, preferably a half to one ounce of castor oil, is administered, to make sure that the bowels will be freely evacuated. The heart, lungs, and urine should be examined. Twenty-four hours before the operation, the face, the surface of the closed lids, the eyelashes, and the eyebrows should be washed with hot water, in which 1 per cent. of carbosapol has been dissolved, and be thoroughly scrubbed with a moderately hard nail-brush. While this is being done the eyelids must be kept tightly closed to prevent any irritation of the conjunctiva. After all the soap has been washed away with hot sterilised water, the conjunctival sac is douched with warm saturated solution of boric acid, special attention being given to the outer and inner canthus and the edges of the eyelids. On the morning of the day of operation the eyelids and surrounding skin are again thoroughly washed and the conjunctival sac douched, every detail of the process, except the scrubbing with the nail-brush. being as carefully attended to as on the previous day. Female patients should have the hair divided and put into two plaits in order to prevent it from becoming matted or entangled in the bandage. On the day itself the patient must not be allowed to eat heartily, and the food itself should be light and easy of digestion. Whenever it is practicable the time chosen ought to be the morning, shortly after the patient has awakened from sleep. For at least an hour before the operation the eyes are kept covered by a compress soaked in a solution of perchloride of mercury, 1 in 5,000, and this should remain in place until it is removed by the surgeon. Half an hour before, 30 grains of bromide of potassium, or teaspoonful of bromosoda, should be administered. After the patient is on the operating table the perchloride dressing is removed, a towel is adjusted like a turban round the head, and a mackintosh covered by a towel is spread over the chest and tucked closely round the neck. All instruments and dressings must be thoroughly sterilised, and the hands of the surgeon and of his assistants rendered aseptic.

Of all operations for the removal of a cataract simple extraction is by far the most perfect, and when successful leaves nothing to be desired. Unfortunately, however, in a considerable percentage of cases a prolapse of the iris occurs within a few hours of the operation and causes difficulties and dangers, all of which may be avoided by performing an iridectomy either at the time of the extraction or a few weeks in advance of it. The preliminary iridectomy has many advantages. It helps to ripen the cataract, and allows the iris time to heal before being pressed upon and bruised by the lens during its escape from the eye, and it tends to equalise the intraocular tension, and thereby diminishes the risk of choroidal hæmorrhage, so that almost all authorities are agreed that it is preferable when patients are old and feeble or have only one eye. Notwithstanding the increased safety, however, which the preliminary iridectomy affords, patients shrink from being operated on twice, and so, if there be no complications, it is the combined operation that is the most frequently performed.

The instruments required are a speculum, a Graefe linear section knife, iris forceps and scissors, a cystotome, a curette, and a small spatula. The knife should be fresh from the cutler, and, after its edge and point have been carefully examined and tested, should, just before being handed to the surgeon, be dipped for a moment in boiling water, and afterwards cooled in a bath of sterilised water. After the eye has been bathed with a warm saturated solution of boric acid, and anæsthetised by a 2 per cent. solution of cocaine, the lids are separated by the speculum, the limbs of which are extended to their utmost capacity and then firmly clamped with a binding screw. The patient is instructed to look downwards, and the surgeon, if he be not ambidexter, stands behind him for the right eye and in front of him for the left. The blade of the knife is laid gently across the cornea in order to satisfy the patient that the eye has been rendered thoroughly anæsthetic. A puncture is made, perpendicular to the surface of the cornea, and exactly in the corneo-scleral margin in a line with the upper border of the pupil, and the handle of the knife is depressed until the blade lies parallel to the surface of the iris. It is then carried slowly across the anterior chamber to a corresponding point on the opposite side where the counter-puncture is made. The knife is now pushed slowly through the cornea, right up to the hilt if possible, but care must be taken that the point does not come into contact with the skin at the inner canthus. The section should be wholly in the corneo-scleral margin, and is completed by two or three sweeps. It should not be any larger than necessary, but should always be big enough to permit the lens to escape easily. The forceps are then introduced through the wound, the iris seized at the pupillary border, gently pulled out of the eye, and excised by a single snip of the scissors. The cystotome is now passed into the eye and directed downwards to the lower border of the pupil. Its cutting edge should be turned towards the lens and the capsule freely ruptured by an incision from below upwards. At this stage the speculum should be removed, and if there be any bleeding from the iris, the blood should be washed away by douching with warm boric acid solution. The lens can now be extracted by pressing on the lower lid by the thumb of the right hand, and on the upper by the forefinger of the left. If any cortical matter remain it should be pressed out by means of a curette, but as a rule digital manipulation is sufficient to remove the whole lens, leaving a jet black pupil. The "toilet" of the eye must now be attended to. If the iris be prolapsed it should be carefully replaced by the spatula, and the lips of the wound left in accurate position. After the lens is removed the patient ought to be able not only to count fingers but to distinguish one from the other.

When the operation is complete, the eye is again bathed with the boric solution, the eyelids wiped dry with a pledget of absorbent cotton wool, and covered by an oval-shaped gauze dressing spread with freshly prepared Martindale's No. 2 boric ointment. Over this are laid several layers of absorbent wool, care being taken to fill up the hollow at the inner canthus so that there will be no unequal pressure upon the eyeball. The dressings are retained in position by a net bandage, which covers both eyes, and which is secured by tapes tied behind, above the head, and below the chin. The patient, after being warned to make no exertion, is carried to his bed, which has been comfortably warmed by hot-water bottles, the temperature of the room being about 60° F., and all light excluded. He is laid on his back and told to keep his head as still as possible, and not to rise or get out of bed for any purpose whatever.

Of the accidents which may occur in the course of an operation the chief are:—1. Premature escape of the aqueous. When this occurs it is not possible to carry the knife across the anterior chamber without wounding the iris. The knife should therefore be withdrawn, the eye bandaged, and the operation postponed until the aqueous has had time to reaccumulate. 2. The iris may fall in front of the knife. When all efforts to disengage the iris are unsuccessful, the edge of the blade should be turned slightly forwards, so that a piece of the iris may be excised during the completion of the section. The piece of iris thus cut off should be picked out of the eye with forceps, and the coloboma forms the iridectomy. 3. Escape of vitreous. This is a much more serious matter, and is always to be feared when the patient is nervous and unsteady, when the corneal section is too small, or when the vitreous is fluid. When the escape occurs before extraction, the lens is apt to slip backwards and pass out of sight, so that the surgeon may fail to remove it. If, on the other hand, the escape follows the extraction, a small loss of vitreous is not of much moment; but whenever the loss is large there is always the danger that sooner or later detachment of the retina will occur. 5. Hæmorrhage from the choroid. Happily this is a rare accident, but when it does occur the eye is hopelessly ruined. Usually it comes on without warning. The operation may have been completed successfully, when all at once the patient cries out with pain, and blood escapes through the wound in sufficient quantity to saturate the dressings. In some cases the eyeball retains its shape, but more frequently it shrinks and requires to be enucleated, partly to get rid of pain and partly lest it should excite sympathetic inflammation of the fellow-eye.

For at least forty-eight hours after the operation the nurses must keep the patient under continuous observation, see that he lies still, and be particularly watchful that the bandages are not disturbed. They should report at once if there be much restlessness, coughing, delirium, retention of urine, or complaint of pain, but never under any circumstances should they administer either stimulants or narcotics unless these have been specially ordered. If all goes well the eyes are dressed on the second day, every care being taken to keep the parts aseptic. The lids are wiped by a piece of gauze and then gently separated, so that the wound may be examined. If by this time the anterior chamber has not reformed it is probable that there is a piece of capsule or conjunctiva between the lips of the wound, and that in consequence the process of healing will be much delayed; but as eyes in which the incision heals slowly rarely suppurate, this complication need cause no alarm. A single drop of a solution of 1 per cent. atropine and 2 per cent. cocaine is instilled; a dressing similar to the one removed applied, and the eyes thereafter bound up for twenty-four hours. More light is now allowed to enter the room, and on the third or the fourth day the dressings are again removed, the eye examined, and, if the pupil be not dilated, another drop of atropine and cocaine solution is instilled. The eye which has not been operated upon may now be left unbandaged, but it is to be protected from the light by a large brown paper shade, or preferably by a pair of protective London smoked glasses. On the fourth day the patient is allowed to sit up in bed for meals, and if there be no sign of inflammation, to leave bed on the ninth day.

At first the dietary should consist largely of liquids so as to avoid as far as possible the movement of the jaws during the act of chewing. On the fourth day some mince-meat and potatoes may be added, and if there be no unfavourable symptoms the patient may be allowed to feed himself. If the bowels have not acted a laxative is given early in the morning of the fourth day.

After successful extraction of the cataract the patient is not able to see clearly until he is provided with glasses equivalent to the lens which has been removed. It is not wise, however, to allow him to use spectacles until six or eight weeks after the operation, and he should be warned to be very careful in the use of the eye for several months. Quite a large percentage of patients regain normal vision, but the good results naturally expected are occasionally spoiled through complications that occur during healing. One of the simplest but most troublesome of these is inversion of the lower lid. Usually the entropion disappears of itself, but in case of difficulty it may be rectified by the application of collodion to the skin of the lid, or the edge of the lid may be pulled outwards by a strip of sticking plaster. The great majority of cataract extractions are followed by inflammation of the iris, but as a rule this is so slight that it need cause no alarm. When, however, there is a large amount of cortical matter, the exudation from the iris becomes mixed with the lenticular substance and seriously interferes with its solution. As a consequence a tough after-cataract remains, and before the patient can regain his sight this requires to be removed by operation. Iritis is always to be feared when, after the first dressing, arthritic foam is seen at the outer and inner canthus, since this may be regarded as a danger signal indicating that the patient has rheumatic or gouty tendencies. In these cases the inflammation may not confine itself to the iris, but may also involve the ciliary body. Severe irido-cyclitis is always followed by a closed pupil. Usually this can be remedied and sight restored by a subsequent operation, but in some cases—more particularly if the dressings have been disturbed, and the eye thereby injured, or if the patient suffer from chronic disorder of the stomach or bladder—the lens matter assumes a yellowish colour, the conjunctiva becomes thickened and velvety, and the eyeball is tender on pressure. There is then great danger that the intraocular tension will become lessened, and that ultimately the eyeball will shrink. If any capsular matter, or a tag of the iris, get entangled in the corneal wound, iridocyclitis is sometimes accompanied by increase in the intraocular tension. This is a very grave complication, and unless relief be speedily obtained sight will be lost from subacute glaucoma. Under these circumstances a broad needle should be passed through the cornea, and made to perforate the structures shutting off the aqueous from the vitreous chamber. When these are freely divided the normal intraocular circulation is restored, and the imminent danger from glaucoma averted.

If post-operative hæmorrhage be excluded, the most dangerous after-complication is suppuration. The introduction of antiseptic methods, and the care now taken of patients both before and after operation, have done much to diminish the risk, but in spite of everything a number of eyes are still lost by septic infection. The inoculation is almost always due to micro-organisms that have been lurking in the conjunctival sac. They are probably always present, but become able to work mischief only in unhealthy subjects, and especially in those whose tissues have been rendered easily vulnerable by alcoholic excesses and want of proper nutriment. Infection takes place all the more readily if, during the exit of the lens, the cornea has been bruised, or if an escape of vitreous has taken place.

The lens and vitreous are most favourable culture media for pyogenic micro-organisms, and so suppuration, once started, pursues its course practically uninfluenced by any form of treatment. In my own experience of such cases I have found that the application of local antiseptics, or the use of the cautery, avails but little: and that the only chance of saving an eye after suppuration of a corneal wound lies in keeping the parts thoroughly clean by copious douching with sterile saline solution, and by the judicious administration of quinine and stimulants. In every case where there is a history of inflammation of the conjunctiva, and where suppuration is to be feared, the secretions ought to be examined for bacteria, and as long as any dangerous organisms - more particularly the streptococcus, the staphylococcus albus or aureus, the diplococcus (pneumococcus), or the bacillus coli—are present, operation should not be attempted.

Prior to the days of aseptic treatment the cases of cataract extraction lost through suppuration were, as now, those in which there had been previous inflammation of the conjunctiva or tear passages, or in which the patient's vitality was low. The tissues could heal in spite of the micro-organisms present in the conjunctival sac; but where these were in abnormal numbers and pyogenic, or where the vulnerability of the tissues was greater, the eye could not be saved. Antiseptic methods have done much to diminish the frequency of disaster in the former group by destroying the germs or lessening their number, but the liability to failure in cases of the latter kind remains as before; and the necessity for action along this line suggested by clinical observation is borne out by the results of theoretical and experimental research so ably dealt with in Professor Welch's recent Huxley Lecture.

"The struggle," says Dr. Welch, "between the bacteria and the body cells in infection may be conceived as an immunising contest, in which each participant is stimulated by its opponent to the production of cytotoxins hostile to the other, and thereby endeavours to make itself immune against its antagonist." When the body is healthy it possesses the power of producing substances specifically antagonistic to all sorts of micro-organisms, but with this power any morbid state at once interferes; and as in all infections, whether local or general, "abnormal metabolism is an essential condition," patients of low vitality will be in such a state that the substances produced may be not only not antagonistic to parasitic organisms, but actually stimulating to their growth.

This being so, one must not only endeavour to render the field of operation sterile, but must also devote the utmost care and attention to what is of equal importance —the physical condition of the patient himself. For some months before the operation he must be well fed, and kept as much as possible in the open air; and a course of salines with iron and quinine is usually attended with the happiest results. Rest and preparation are necessary in every case, no matter what may be the sufferer's position in life, but should he be one who has been, owing to defective eyesight, unfit for work for several months, and through poverty unable to procure a sufficient amount of food, he will require special care, since not only will he be in a condition unfavourable for the rapid healing of any wound, but he will also have tissues vulnerable to the slightest infective taint, and suited for the rapid spread of suppuration. While, therefore, every effort should be made to render the field of operation free from micro-organisms, care should equally be bestowed on the state of the patient himself, especially if he be poor and habitually ill-nourished. Were more attention paid to the health of those broken-down subjects prior to cataract operations the number of failures from suppuration would be very considerably reduced, and it is only by care that this much to be desired result can be attained.

SOME DISEASES SIMULATING ACUTE RHEUMATISM, AND THEIR PROBABLE RELATION TO CHRONIC RHEUMATOID ARTHRITIS (*a*)

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It was my privilege some years ago to give a lantern demonstration at the medical institution, illusting the clinical features of chronic rheumatoid arthritis, and of a number of other conditions which are sometimes mistaken for that disease. On the occasion of that demonstration I directed attention to a circumstance which is interesting and probably important, when considered in conjunction with the experiences culled from cases such as those about to be related. I refer to the fact that many of the cases in which the chronic deformities had taken place, and had progressively become worse—rendering the patient at last crippled and helpless—began with symptoms similar to those which I am about to detail as characterising some of the diseases which simulate acute rheumatism. In other words, these patients have told me that their illnesses began with very protracted attacks of "rheumatic fever," which resisted all treatment and gradually merged into the condition of arthritic deformity, which they regard as chronic rheumatism.

I have had several opportunities of watching these protracted cases of so-called rheumatic fever, and have seen them undergo a, sometimes rapid, transition into classic examples of rheumatoid arthritis, and, to me, it seems evident that these initial rheumatic attacks are not, properly speaking, rheumatic in their nature at all, but that they constitute the acute phase of what will ultimately become chronic rheumatoid arthritis, unless the cause can be found and removed, as it sometimes may be.

A reference to any series of statistics bearing upon the treatment of acute rheumatism with the salicylates, elicits the fact that a small proportion of the cases are little, if at all, influenced by this means of treatment; the fever goes on for weeks and weeks and the pains and sweating remain, so that it is considered that there are cases of rheumatic fever which resist the action of the specific remedy. From my own observations—which have been carefully directed to this point during the past few years—I have concluded that these resisting cases are not rheumatic fever, their clinical histories are different, as well as their relation to the salicylates, and they are evidently the result of a totally different toxin, the source of which can sometimes be traced and at other times it cannot. In some cases we are able to say that some part of the nasal, respiratory, or gastro-intestinal mucous membrane has been the seat of absorption, and it is more than probable that one of the reasons for the prevalence of the chronic disease in women depends upon the absorption of the poison from some part of the genital tract, to which far too little attention has been paid in this relation, considering that a large number of the patients themselves associate the onset of chronic rheumatoid arthritis with disorders of these parts. Regarding the specific action of the salicylates in rheumatic fever, I have been so impressed with my own almost invariable experience that true rheumatic fever quickly subsides under their administration, whereas the resisting cases so frequently prove to be non-rheumatic, that I have come to think that no true cases of rheumatic fever are uninfluenced by them.

In the course of the years 1900-01 fifty-two cases were admitted under my care at the Royal Southern Hospital, registered as rheumatism in one form or another (excluding cases of established rheumatoid arthritis); of these, thirty-seven were undoubted cases of acute rheumatism, three proved to be early cases of rheumatoid arthritis, and six were indefinite. The remaining six cases are those worthy of note on account of their similarity to rheumatic fever in some of their clinical features, while they differ from it not only in this resistance to the action of the salicylates, but also in their presenting no liability to cardiac complications, and in some other particulars which shall be referred to incidentally. It is not possible to show the temperature charts, but it may be mentioned that in these toxic conditions the temperature is remittent, the remissions being in the mornings and the exacerbations in the afternoons and evenings. The joint pains tend to be symmetrical, and to spread to new joints, without leaving those already affected, *i.e.*, they do not flit about as in acute rheumatism. The temporo maxillary and cervical joints are often affected, and the small joints of the hands and feet, and the sterno clavicular articulations are not unfrequently attacked as well as the larger joints.

Case I.—C. W., labourer, æt. 40, admitted September 18, 1901, complaining of pains and swellings of the joints of both upper and lower extremities, which began fourteen days previously. No previous illnesses. Ascribed present condition to getting wet. There was headache and profuse sweating, swellings of knuckles of both hands and tenderness in the finger joints. Wrists, elbows, and shoulders very painful; right ankle swollen, and pain in both ankles extending up to the knees. Heart sounds all closed, but very faint (emphysema). Lungs normal; urine, sp. gr. 1018; acid; no albumin.

Sept. 18th.—He was given 15 grs. sodium salicylate every four hours, but the temperature, which was remittent in type (99·0° a.m. to 101° p.m.) tended to be higher in the evenings during the next few days. The nasal mucous membrane was normal, slight discharge of mucus. On September 22nd, boric acid insufflations were ordered in addition to the salicylate.

Sept. 25th.—There being no improvement, the fever continuing, and the pains and redness having involved the right sterno clavicular joint, the salicylate was omitted and guaiacol carbonate (10 grs., four times daily) substituted. This was not followed by any benefit.

Sept. 28th.—A draught containing hydrochloride of quinine 4 grs., with phenazonum 10 grs., was now given night and morning, and subsequently three times a day. The temperature fell by lysis, becoming normal on October 1st, after which date it did not again rise above the normal line.

There was corresponding improvement in the general conditions, the pains and swellings being entirely gone by October 4th. Concomitantly with this improvement, patient commenced to eliminate with the perspiration some volatile matter, which had a strong garlic-like odour. It was so offensive that he had to be removed from the ward (the sweat did not blacken lead paper). The elimination of this matter was assisted by the administration of infusion

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(*a*) Contributed to the Reports of the Royal Southern Hospital, Liverpool.

of jaborandi, and it had ceased by about October 22nd. He left the hospital perfectly well on October 25th.

In this case, the source of the infection was not certain; but it was probably gastro intestinal. The elimination of the garlic-smelling material had evidently something to do with the recovery, which so rapidly followed the administration of the quinine and phenazonum.

Case II.—J. L., æt. 26, admitted July 31st, 1901. previous rheumatic attacks, viz., fourteen years ago and six years ago. Present illness began seven days ago with headache, sweating, pains and much swelling of knees, toes, elbows and shoulders. On admission slight swelling and redness and severe pains in these joints, and also in the finger joints. Sweating freely—perspiration sour smelling. Miliaria over chest and abdomen. Tongue thickly furred. Bowels constipated. Respiratory system normal. Heart sounds normal. Pulse 90, regular, full volume. Low tension. Spleen, ninth rib to costal margin.

He was at once ordered 10 grs. sodium salicylate every three hours, but at the end of a week this had not influenced the temperature, which ranged from 99 6° in the mornings to 101·2° in the evenings; in fact, on August 5th, 6th, and 7th the temperature had become higher each night, and the pains were as severe as ever, especially in the right elbow and shoulder, and the knuckles had become red and swollen. The sterno clavicular articulations too had become swollen and painful.

On August 7th guaiacol carbonate was substituted for the salicylate, but on the 10th the temperature was still high, 101·4, and the left temporo maxillary articulation had become involved. There was profuse perspiration; the skin covered with miliaria. On this date it was observed that the secretions from the nose were bloodstained. The guaiacol was stopped, and five grains of sulphate of quinine with 30 m. dilute hydrobromic acid ordered at four-hourly intervals for four doses. The nose to be washed out frequently with a lotion containing one drachm of liquor hamamelidis in an ounce of a saturated solution of boracic acid.

On August 11th the evening temperature was 99 6°, and during the daytime it was subnormal, and after August 12th it remained normal.

The pains rapidly subsided, and had gone by August 16th, and there was corresponding cessation of the sweating, and general improvement.

On August 29th there was some return of the pains in the hands, and the temperature registered 100° in the evening. This was found to be due to a small glandular abscess in the right axilla, on relief of which the patient made an uneventful recovery. The treatment of the nose was continued until his discharge on August 29th, 1901.

The seat of absorption was in this case a chronic rhinitis.

Case III.—P. D., æt. 38, labourer, admitted April 3rd, 1901. No previous illnesses, no syphilis. Had a rheumatic attack fourteen years ago, and has had three similar attacks since, all characterised by pains in joints. Present attack commenced three weeks ago with severe pains and swellings in right elbow and wrist, and both knees, which persist. and he has, in addition, pain and tenderness in joints of fingers. Sweating. Temperature on admission, 101°. Cardiac sounds closed, somewhat muffled by emphysema. Three days ago left eye became inflamed. He is subject to these attacks of catarrhal ophthalmia. Injection of sclera, marked chemosis. Bowels moved every second day. Liver normal.

He was given sodium salicylate and sodium bicarbonate, of each grs. x. every four hours, and on April 5th the temperature was normal. Systolic impurity at cardiac apex. The pains did not disappear with the subsidence of the temperature, and on April 7th gr. 5 potass iod. with grs. x. sod. bicarb. was substituted for the salicylate and the pains gradually subsided (recurring in intensity from time to time) until May 1st, when some slight soreness remained in the elbows. At this time the conjunctivitis spread to the right eye (left had not recovered), which became intensely inflamed, and on May 3rd there was some iritis of this eye. From May 5th to 10th there was recrudescence of pain in elbows and hands, the latter being much swollen. The temperature during these days was remittent in type, 99·2° in morning to 101·6° in evening, there being a lysis till May 12th, when it became practically normal; on May 18th the fever returned in similar type and continued until June 9th, when for the first time it did not exceed 99·4°. Thereafter there was no rise above 99·2° until June 22nd, when it became normal and remained so. During the whole of this time the rheumatoid pains were severe, there was profuse sweating and the symptoms were quite unrelieved by salicylates given alone, with colchium, bicarbonate of sodium, and with cimicifuga. Nothing, in fact, either locally or internally, did any good until June 8th, when quinine sulph. gr. v. with acid hydrobromic dil. m. xxx., was given three times a day with most beneficial results as regards the fever, and the acuteness of the pain was relieved. Some stiffness remained in the left ankle and shoulder, and in a finger of the left hand; these joints were painted with guaiacol and tinct. iodi. and eventually recovered completely. On July 1st there was slight return of pain and some stomach disturbance; July 3rd, vomiting, followed by diarrhœa, and the temperature rose to 104·2°, falling to normal next day. He was given sulphocarbolate of soda grs. x. with subnitrate of bismuth grs. xv., every four hours, and a Dover's powder to stop diarrhœa. He gradually recovered, and left cured on July 24th.

The condition probably resulted from a gastro-intestinal toxin.

Case IV.—R. P., tailor, æt. 20, admitted August 27th, 1900. Had an attack of rheumatism in both arms and legs two months ago. Eyes also inflamed at the time. Five days ago got a wetting, followed by severe pains in the left shoulder, right knee, right index finger, left shoulder and back of neck. He also started inflamed condition of eyes. No cardiac lesion. There was severe pain in eyes—slight iritis, and photophobia. This condition cleared up, under atropin, by September 12th. Shortly after admission it was found that he had a pustular eczema of the scalp, with many crusts. The hair was cropped, antiseptic fomentations applied until crusts all removed, then a suitable ointment.

The temperature was remittent in type, varying between 90° in the mornings and 101° in the evenings, until September 5th, after which it never exceeded 99°, but the pains and stiffness remained until after September 18th. After September 23rd the temperature remained normal, and recovery was uninterrupted. Bowels regular throughout.

Salicylates were given until September 20th. The fever was well marked until September 5th (ten days of treatment), subfebrile condition (99°—99.2°) until September 23rd, corresponding with disappearance of pains and stiffness in joints and with the removal of pustular discharges from the head, the temperature did not become normal to remain so until September 23rd, three days after all salicylates had been omitted.

Case V.—Malaria like Rigors.—Rheumatoid Pains in Joints.—Nasal Ulcer.—J. L., æt. 21, Russian sailor, admitted August 31st, 1901 (speaks English badly, gathered that he had been ill for some weeks), complains of pains in the joints of right arm and leg, very slight tenderness on pressure over the joints of these limbs, but no visible swelling; heart and lungs normal. All the extremities are cold, notwithstanding the warm weather. Nervous system excitable, exaggerated reflexes both in arms and legs. Knee and ankle clonus on both sides. He was given nitrite of soda gr. 1, and sp. ætheris nit., m. x. thrice daily. No rise of temperature occurred, and he slept and ate well until September 15th, when he had a rigor at one p.m., and the temperature rose to 103°. It rapidly fell to normal. September 16th, rigor and temperature 105° at one p.m. September 17th, rigor and temperature 103·6° at one p.m. September 18th, rigor and temp. 103·8° at ten a.m., the temperature remained high until one p.m., when 4 grs. quinine were given every four hours, and after this there was no further rise of temperature. The question of malaria was investigated. Nothing could be discovered in the blood, and the pain in the joints (which became slightly swollen), was not suggestive of malaria. A thorough examination revealed nothing either in the chest or abdomen to account for the rigors, but on the septal side of the right nostril an abrasion of the mucous membrane was noted, and some blood-stained mucus escaped from this side of the nose. The nostril was plugged with boric wool dipped in boric acid solution, at intervals of an hour. September 26th, quinine was given gr. 1, with nitric acid, thrice daily. September 30th, a dry pleuritic rub (no fever) appeared over the hepatic region of the right chest; this disappeared after application of a blister on October 3rd, when iodide of potassium was given thrice daily; after this, recovery was uninterrupted.

Case VI.—Alfred S., æt. 18, admitted April 8th, 1902, suffering from necrosis of right tibia (under care of Mr. Newbolt). April 22nd, operation. He did well, wound healed and temperature remained normal until May 24th, when he began to suffer from pains in knees and shoulders, and subsequently his wrists, knuckles, finger joints, elbows, ankles and toe joints all became swollen and intensely tender He had sweatings and remittent temperature. Salicylate of soda was given, but by June 7th no improvement having taken place, the temperature varying from 100·2° in the mornings to 104° in the evenings, 5 gr. doses of sulphate of quinine with M.30 of dilute hydrobromic acid were ordered to be given three times a day. He was placed under my care on June 12th. The operation wound was healed, and no breach of surface was found externally. On examining the nose the mucous membranes of the right nostril were seen to be swollen, redder than normal, and in contact. There was much sticky secretion between the opposed surfaces. The nose was ordered to be thoroughly disinfected four times a day with a powder consisting of hydrochlorate of morphia gr. 1, bismuth subnitrate 2 drachms, and acid boracic to 1 ounce. The temperature immediately began to subside. June 15th, pains much improved. Owing to want of care and perseverance in the treatment, which the patient at first resented, saying that "he did not see what his nose had to do with rheumatism," there was a temporary relapse, but after pressing the nasal disinfection the whole condition cleared up. The temperature became normal, the pains and swellings disappeared, and convalescence was speedily established. The heart in this case became dilated, and there was for a time a suspicious systolic murmur, which eventually cleared up entirely. It is interesting to note that the quinine with hydrobromic acid, which had proved so efficacious in cases apparently of gastro-intestinal origin, proved unavailing in this case, and it was only after the local source of infection had been attacked that relief was secured.

It must be noted, that attention was first directed to the nasal cavity as a seat of toxic absorption by Dr. William Carter, and it was in consequence of having read his address given to the Birkenhead Medical Society, on March 9th, 1894, that I came to examine the nose carefully in these rheumatoid cases.

PAROXYSMAL TACHYCARDIA ASSOCIATED WITH EPILEPSY. (*a*)

By R. TRAVERS SMITH, M.D., F.R.C.P.I.
Visiting Physician to the Richmond, Whitworth, and Hardwicke Hospitals, Dublin, &c.

K. M., a healthy-looking well-developed girl, æt. 14, was brought to the Whitworth Hospital by her sister on September 26th of this year (1902). She complained only of violent and rapid beating of her heart On feeling her radial artery the pulse was found frequent beyond counting, small, thready, and compressible. Auscultation of the heart revealed the astonishing rapidity of 248 beats per minute. My resident pupil, Mr. Tighe, independently confirmed this observation at the time. Except for its rapidity an impulse somewhat diffuse, and rather short, sharp sounds, the heart appeared normal. Nothing was noticed elsewhere other than a *distrait* and somewhat vacuous facial expression. At the girl's own request I allowed her to return home, having first made arrangements for her admission to hospital in the afternoon. On her arrival at home, and after this paroxysm of tachycardia had ceased, though she had some vague recollection of having been brought to a hospital in the morning, she did not remember the details of our interview, and the news imparted to her by her sister that she was to become an inmate of the hospital in the afternoon, caused her surprise and consternation. This circumstance well illustrates the lapses or partial lapses of memory accompanying many of the paroxysms of tachycardia in this patient, of which further evidence was subsequently adduced. The night of her admission she again complained of "an attack of the heart," when Dr. Holden, the house physician, was able to count her heart beats at 260 per minute.

The following personal and family histories were obtained from the patient herself and her relatives. K. M. had always been healthy till a year ago, when, in school one day, she suddenly became weak and her heart beat violently. The next "heart attack" as she called them, did not supervene for three months, from which time they increased in frequency till for some months before admission they occurred every two or three days, sometimes even twice daily. These "heart attacks" would come on absolutely suddenly without apparent cause, last varyingly from five minutes to four hours (commonly one or two hours), then as suddenly vanish. In these attacks she would be conscious of the great rapidity of her heart's action, but would make no further complaint. Her relatives (as well as the patient herself) recognised the impairment of memory which accompanied these paroxysms of tachycardia, and stated that on two or three occasions it amounted to a state of unconsciousness, in which she fell to the ground but did not convulse. Abundant passage of urine after her paroxysms was noted by the patient. Six months after the first appearance of these cardiac symptoms she began to suffer from seizures, of what I presume to have been minor epilepsy. Without warning she would suddenly lose consciousness for a minute or so, as well as she could judge. During that time she

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(*a*) Read before the Medical Section of the Royal Academy of Medicine of Ireland, on November 21st, 1902.

would be absolutely oblivious to her surroundings, stop what she was doing or saying, then recall herself to consciousness with an effort. On these occasions she experienced nothing abnormal in her heart, in fact, looked upon these "attacks of giddiness," as she called them, as something entirely different from her "heart attacks." They never became as frequent as the latter, occurring only once a week approximately.

The opinion that these "heart attacks" were genuine paroxysms of tachycardia was strongly confirmed by the testimony of the patient's stepmother, a trained hospital nurse, who recognised the extreme rapidity of the pulse.

K. M.'s family history is of interest. She is the youngest of eleven children, four boys and seven girls. Her mother died from an unknown cause. Her maternal grandmother, herself healthy, had three sisters, all of whom were healthy, all of whom married, and each had one child. These three children, first cousins of K. M.'s mother, were all epileptics, one of whom became insane. This history indicates a decided neuropathic taint on the maternal side of K. M.'s family.

During the first of the seven weeks' residence in hospital K. M. had several severe paroxysms of tachycardia, and, as well, two seizures of major epilepsy, separated from one another by an interval of three days. These two fits appeared without premonition, the patient suddenly becoming unconscious and convulsing in the face and limbs. The convulsions passed off in a few minutes, save for an occasional twitch of the facial muscles, but the patient still remained in a state of coma for nearly an hour in the first, for fifteen minutes in the second. The pulse rate was up to 100 and to 96 respectively in the two fits. On recovery from both drowsiness and marked irritability were observed.

It may be stated at this point that repeated examinations made during the stay of the patient in hospital, except on the occurrence of the two fits or paroxysms of tachycardia, revealed nothing abnormal in the heart or elsewhere save an occasional functional systolic murmur most audible in the pulmonary area. The girl was bright and intelligent, with normal pulse and healthy apparently in every respect. The menstrual periods were not established. In short, observations made in hospital merely corroborated the patient's own statements.

After the second fit at the end of the first week in hospital, potassium bromide was administered in gradually increasing doses with, so far, very pleasing results. The patient has had no further fits of major or minor epilepsy, though it is now just seven weeks since this line of treatment was commenced. The paroxysms of tachycardia have reduced in frequency, more so in duration and severity. For the last two weeks she has had but three paroxysms, each of which was mild and lasted only five minutes.

It is not my intention to enter into the clinical details or the supposed etiology of the interesting symptom, tachycardia. Dr. Finny has dealt with the subject very fully, has recorded three instructive cases, and has compiled a careful bibliography, to be found in Vol. XVII. of our Transactions. Suffice it to say now that tachycardia in some instances is merely a symptom which may be due to diverse causes. Among these are organic disease of the heart or vessels, exophthalmic goitre, toxic states, and fevers. Such tachycardia has been styled "symptomatic" in contradistinction to the variety in which the rapid action of the heart, usual in paroxysms, appears to be the sole manifestation of any morbid state. This variety has been called "essential," its etiology is still enveloped in a cloud of mystery. Trousseau suggested the phrase "partial epilepsy," and Talamon "cardiac epilepsy" in this connection. The idea, therefore, that some cases of essential paroxysmal tachycardia may be fundamentally similar from a pathological standpoint to epilepsy, is not new. Yet, in the literature of the subject I can find no record of a case (though it is highly probable that such exists) in which paroxysmal tachycardia and epilepsy were as intimately associated as in that above related. The association may be thus summarised:—

1. The patient inherited predisposition to epilepsy, three of her mother's first cousins, each of separate parentage, suffering from it.

2. The tachycardia commencing in early life, its sudden paroxysmal nature, its mysterious appearance, disappearance, and reappearance; its tendency to become more frequent and severe, are all suggestive of functional epilepsy.

3. The patient's vacant look in a paroxysm, the impairment of memory, occasionally amounting to unconsciousness, indicate a mild degree of the psychical disturbances of epilepsy.

4. The occurrence of polyuria after a paroxysm of the heart as after epilepsy. (Verified in hospital.)

5. Minor epilepsy showing itself as well as the tachycardia, both occurring frequently, but without apparent order or sequence.

6. The subsequent appearance of major epilepsy in the same patient.

7. The decided improvement (if only for the time being) of the paroxysmal tachycardia on the administration of potassium bromide.

8. Perturbation of the heart's action has been observed as an aura in epilepsy.

In fact, it appeared in this particular case, that epileptic "nerve storms" were more prone to sweep in the direction of the heart than in that of the voluntary muscles, but whatever their direction might be, they temporarily devastated, to some degree, the higher physical centres. This theory is not suggested as a serious elucidation of the pathology of the case; at best, it is only somewhat less hypothetical than the explanation which would have been proffered in the Middle Ages, namely, that at times the demon of epilepsy entered the girl's heart. My experience, however, will prompt me to give potassium bromide a fair trial in the next case of paroxysmal tachycardia that falls to my lot, on the supposition that it may possibly in some instances be a rare manifestation of epilepsy.

THE PRESENT STATE OF THE LEPROSY QUESTION IN INDIA AND CEYLON. *(a)*

By JONATHAN HUTCHINSON, F.R.S., F.R.C.S., &c.,

Emeritus Professor of Surgery at the London Hospital.

We are here in the interest of a tenth of a million of our fellow-subjects who are, at the present time, in our great Indian Empire, sufferers from the disease known as leprosy. They are, for the most part, poor and ignorant, and quite incapable of devising measures to prevent the perpetuation of this curse. It is for educated Englishmen, many of them trained investigators, to bring their knowledge and reasoning powers to bear upon the facts for their benefit. It is at least thirty years since I first planned the tour of investigation which I now hope to accomplish. In the interval I have read everything which has come to hand on the subject, and have taken the evidence of a large number of medical men, missionaries, and others who have resided in India. Through the whole of this period I have held firmly the conviction, which has strengthened as years have advanced, that leprosy is in the main a food disease, that it spreads only to a very small extent by anything of the nature of personal contagion, and that the one article of food which is to be suspected is badly-cured fish, eaten without its being sufficiently cooked. In all ages, and in almost every country where leprosy has prevailed, the popular belief has been that the eating of fish is in some way connected with it. References to this belief are numerous in the writings of old authors, and in a large majority of modern local reports there occurs some allusion to the fish-eating habits of the community. The way in which the disease has waned and ultimately almost ceased in Europe with advancing civilisation is also in harmony with this belief. It advanced in inland districts of Europe with the advent of Christianity and the observance of fish fasts, and it disappeared when Protestantism threw these fasts into disuse. Other influences also took their share, the development of agriculture and the increased production of other kinds of food being among the chief. Norway and Iceland have always been conspicuous for the prevalence of the disease. The former has from time immemorial had the largest fishing trade in the world, and of the latter an old geographer wrote that it ought to be named "stock fish." In both these places fish is still very largely consumed, and in both the prevalence of leprosy, in proportion to population, exceeds that of India. It will probably be very near the truth to say that over the whole world at the present day the prevalence of leprosy is in ratio with the use of cured fish as an article of diet. A suggestion has recently been made in reference to the precise mode in which leprosy might be communicated from one person to another, which, I think, goes far not only to reconcile the two schools of contagionists and non-contagionists, but to explain away, for the most part, all the facts which have been supposed to imply hereditary transmission. It is that the only way in which the living bacillus can be received into the system is by the stomach, and that practically such communication takes place only when food is eaten which has been contaminated by a leper's hands. To this mode of communication the term "commensal" may suitably be applied. It will probably astonish many of you to learn that, after all, leprosy is not very prevalent on the mainland of India. The popular belief is that the disease is scarcely known in South Africa, and that it overruns India as a special curse. It is, as a matter of fact, in ratio with the population, as common in one as in the other, and in neither does it exceed that which, in spite of the boasted results of segregation, still obtains in Norway. In all these three places its average prevalence is something less than 5 per 10,000. In Ceylon it does not reach 2 per 10,000; but in some of the smaller islands off the coast of India—Minicoy, for instance—where fish is eaten by the labouring population three times a day—its prevalence reaches the enormous ratio of 100 or 150 per 10,000. In some countries, as in South Africa, lepers carefully conceal themselves, whilst in others, as in India, seeking charity they parade their miseries. Among the more important inquiries which I propose to keep in view in India is the inquiry, from those qualified to judge, as to whether the statements made by certain Hindus and Brahmins that they have never eaten fish are trustworthy.

(a) Abstract of lecture delivered at the Polyclinic in connection with the Prince of Wales's Leprosy Fund.

Clinical Records.

THE SEAMEN'S HOSPITAL, ROYAL ALBERT DOCK.

A case of strangulated inguinal hernia, in which "reduction en masse" was caused by the employment of taxis. (*a*)

By Lawrie McGavin, F.R.C.S.Eng.

The patient, a man, æt. 52, a dock labourer by trade, was admitted to the Seamen's Hospital, Royal Albert Dock, on September 20th, 1902, with the following history. For nine years he had suffered from a right inguinal hernia which had always been easily reducible, no signs of strangulation having ever been present. On the night of September 14th, however, the rupture suddenly came down and he was unable to get it back. He immediately called in a medical man who made several ineffectual attempts at reduction by the use of taxis. On the last attempt the mass partially disappeared, and the patient at once experienced great pain, and almost immediately commenced to vomit. On the following day the vomit became stercoraceous and continued so till admission, nothing further apparently being done for him.

On admission the patient was evidently *in extremis*, and appeared to be suffering from general peritonitis. His temperature was subnormal, and his pulse 115 and thready and dicrotic. The abdomen was very distended, and there was some tenderness, especially over the right iliac fossa, but no mass could be felt there. In the right side of the scrotum a soft mass was noticed, which, in view of the abdominal condition suggested collapse of the bowel from perforation, with possibly some omentum still strangulated in the sac. Neither flatus nor motion had been passed for six days; the tongue was dry and brown, the breath extremely foul, and the abdominal type of face well marked. In the hope of being able to do something for what I thought might be a partial reduction of a "hernia en bissac," with rupture of the bowel at the neck of the sac, I had the patient removed to the theatre. Gas and ether were administered, but before three breaths of pure ether had been taken he suddenly ceased to breathe. Artificial respiration was therefore resorted to, but he almost at once vomited a quantity of fæculent matter and died.

At the autopsy the following condition was disclosed: The right side of the scrotum contained a flaccid vaginal hydrocele of moderate dimensions, above which the cord was slightly thickened; there was neither bruising nor ecchymosis of the scrotal contents.

On opening the abdomen some foul fluid escaped. The bowels were distended, and on tracing the small intestine downwards it led to a point in the ilio-inguinal region, below and rather internal to the tip of the cæcum, where it was found to enter what appeared to be the internal abdominal ring, whose margins were much thickened as from old-standing irritation, and whose aperture measured about an inch in diameter. This was situated over a bulging mass in the iliac fossa, and lay behind and external to the cæcum. On dividing the peritoneum over this mass a sac was reached, which on being opened appeared to be the original sac of the hernia. It contained a portion of the ileum (which measured about ten inches in length) in a condition of extreme congestion, almost gangrenous at the point of constriction and its mesentery. The site of the strangulation was about a foot above the ileo-cæcal valve.

General peritonitis was present, but no actual perforation could be found. The heart was firmly contracted in systole, although the larynx was full of fæcal vomit.

I have thought this case worthy of publication as much on account of its moral lesson as of its clinical interest, for it serves to emphasise what has been so repeatedly pointed out by many authorities, that the attempt to reduce a strangulation of the intestine by taxis is unwise, and that when persisted in repeatedly, such treatment is quite unjustifiable.

It is, I believe, unwise to attempt reduction by taxis

(*a*) Read before the Clinical Society of London, November 28th, 1902.

at all, unless the congestion of the bowel be first, to some extent, relieved by the application of ice (in cases where it is thought that the vitality of the bowel will not be interfered with by such treatment), and in cases where the vomit is fæculent it is certainly so.

It is under any circumstances, a step taken in the dark, for unless we can answer certain questions, we are obviously exposing the patient to risks of which he knows nothing, and from which we, as surgeons, ought rather to safeguard him. First, is the bowel ulcerated? Secondly, is it adherent to the neck of the sac? Thirdly, can we be certain that there are no adhesions across the neck of the sac, over which we may possibly reduce the contents? and lastly, are we dealing with a "hernia en bissac?" Again an element of uncertainty lies in the structural condition of the bowel in question, for just as the skin of one patient differs in texture from that of another, so in one patient the bowels may be thin and semitranslucent, while in another they may be thick and opaque. It is clear that taxis will damage the first more easily than the second under similar conditions.

In view of the fact that disasters have happened and will happen again, it is, I think, time to abandon taxis as an empirical measure, unworthy of the name of sound surgery.

Admitting that taxis were a justifiable measure, how long may it be persisted in, and how much force may be exerted? Here are two questions which are obviously without sense, for each depends on the condition of the bowel, which is invisible to the eye, and the second to a great extent on the lightness of touch and the muscular power of the individual surgeon, both of them inestimable qualities, and varying considerably in most of us.

Glancing for a moment at the standard text-books on the subject, we find an attempt made in each to limit the duration of taxis; thus, in one case, ten minutes; in another five, in another "a few minutes," and in another three to five minutes are given as the time limit, all of them advising only "a moderate degree of force." Thus the advice given is of a very indefinite order, and leaves much to be desired in the question of standardisation. The most definite opinion of all on the subject is to be found in Messrs. Watson Cheyne and Burghard's recent work, in which the authors frankly condemn the practice in view of the slight risks of the operation of kelotomy.

Reviewing the dangers of taxis, one cannot help wondering how any surgeon can be willing to face the responsibility of them, for all are serious, and in many the condition of the patient is rendered well-nigh hopeless; in all the mortality is very high.

Thus "Reduction *en masse*" has a mortality of 57 per cent. for all herniæ (inguinal 50 per cent; femoral. 73·6 per cent. (*a*)

Resection of small intestine for gangrene, 50 per cent. (*b*)

Suppurative peritonitis (in cases operated on), 60 per cent. (*c*)

There must be considered also the possibility of asphyxia from fæcal vomiting if the case eventually comes to operation, as in the case I have reported; of septic pneumonia, and even (in the highly improbable event of spontaneous cure) of the occurrence of an intractable fæcal fistula. Against these heavy odds must be placed the post-operative mortality of kelotomy, which if performed within twenty-four hours stands at 10 per cent. to 12 per cent., but if over three days from the time of strangulation at 50 per cent. (*d*)

While I, personally, do not recognise the position of taxis under any circumstances, as a sound surgical measure for the relief of strangulated herniæ I am fully aware that there are many surgeons who still admit its utility. I would, therefore, in deference to these authorities, suggest the following conditions as being those in which such treatment is absolutely contra-indicated, and it will be seen that the margin in which cases suitable for treatment by taxis may be found, is a very narrow one.

(1) All femoral cases, for those are usually found in women whose intestines are thin, the bowel commonly tightly constricted, and lying on the knife-edge of Gimbernat's ligament in a canal whose peculiar shape renders reduction somewhat difficult at all times.

(2) In all inguinal and umbilical cases when (a) the strangulation is more than twelve hours old; (b) the hernia has long been irreducible; (c) the vomit is fæculent in the least degree; (d) the hernia is a large scrotal one of old standing with a tight ring, such hernia, as Rowlands points out, being those which are most prone "to reduction *en masse*"; (e) any sign of inflammation is present; (f) pain is a marked symptom; (g) the attempt has already failed.

"Reduction *en masse*" is a comparatively rare occurrence, and Rowlands,(*a*) in his recent investigations on 100 cases, points out that at Guy's Hospital only fifteen cases have been recorded in the last forty years; the subperitoneal reduction into the iliac fossa being the usual variety.

In my own case, the chief points of interest are, I think, the large size of the mass reduced, the entire absence of damage to the contents of the scrotum, the question raised by the death of the patient, as to the advisability of washing out the stomach prior to operation, and that of the best method of dealing with these cases.

With regard to lavage, Treves (*b*) has recommended this plan, and the soundness of it must be obvious to all surgeons, for in urgent cases, the immediate danger of suffocation under the anæsthetic is considerable, and in the post-operative treatment the risk of septic pneumonia is reduced, as is also the danger of absorption of fæcal material from the stomach.

A point of importance is, I think, that if it is done at all it should be done previous to the administration of the anæsthetic, in view of the possible embarrassment to an already feeble respiration.

In the present instance I did not consider it wise to attempt lavage owing to the extreme urgency of the case. As to the method of operating in these cases, the idea of performing a laparotomy before investigating the state of the bowel at the seat of constriction through the inguinal canal seems to me dangerous, from the possibility of rupturing it at a weak spot in the attempt to withdraw it from the sac. That such operations are successful is evident from the fact that Erichsen (*c*) mentions three cases, two by Thorburn and one by Barker, which resulted in cure; but when the diagnosis is in doubt, or, as in the case recorded by Rowlands in his paper (*a*), where perforation into the sac has actually taken place, the performance o laparotomy must be an extremely dangerous practice.

Transactions of Societies.

CLINICAL SOCIETY OF LONDON.

MEETING HELD FRIDAY, NOVEMBER 28TH, 1902.

MR. HOWARD MARSH, F.R.C.S., in the Chair.

MR. A. W. MAYO ROBSON (Leeds) read a paper

ON RUPTURED CRUCIAL LIGAMENTS AND THEIR REPAIR BY OPERATION.

The patient was a miner, æt. 41, admitted to the Leeds General Infirmary, November, 1895, for lameness, the result of an accident nine months before, when he was almost buried by a fall of earth and sustained numerous injuries, besides the one to the joint in question. When admitted to the infirmary, the right knee was swollen but free from tenderness on manipulation. When the muscles were pressed the bones were in good position, but as soon as the muscles were relaxed the

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(*a*) Guy's Hospital Reports. Vol. LVI., p. 149. Rowlands.
(*b*) *New York Med. Journ.*, 1889. McCosh.
(*c*) Gould and Warren. "International Text-Book of Surgery." Vol. II., p. 524.
(*d*) Gould and Warren. Op. Cit., p. 466.

(*a*) Rowlands. Op. Cit.
(*b*) "Manual of Operative Surgery," Vol II., p. 383.
(*c*) "The Science and Art of Surgery," Vol. II., p. 845.

tibia fell backward until stopped by the ligamentum patellæ and on manipulation the head of the tibia could be brought forward in front of the femur, there being also free lateral movement of the head of the tibia on the femur and some fluid in the joint. It was manifest that not only were all the ligaments relaxed, but that the crucial ligaments had been ruptured. On November 21st, 1895, the joint was opened by a semilunar incision carried across the front and dividing the ligamentum patellæ. The synovial membrane was found inflamed and there was an excess of fluid in the joint. Both crucial ligaments were found completely ruptured, having been torn from their upper attachments, the ends being in a shredy condition. They were stitched in position by means of catgut ligatures, the anterior being stitched to the synovial membrane and tissues on the inner side of the external condyle, and the posterior, which was too short and was split in order to lengthen it, was fixed by sutures to the synovial membrane and cartilage on the outer side of the inner condyle. The wound was then stitched up by means of buried catgut sutures, and was closed superficially by interrupted silk-worm gut sutures. The result was very successful, complete restoration of the normal movements of the joint having occurred.

The stitches were removed on December 4th, and on the 14th plaster of Paris was applied, and he was allowed to get about on a Thomas's splint and to go home. The plaster was removed in a month, after which movement gradually returned under massage. When seen on October 24th, 1901, the patient was walking without a limp and could run. He said that his leg was perfectly strong, and that he could work eight hours a day at his old employment of getting coal, and that he had never been off work a day on account of his knee since the year of his accident The joint could be extended to the straight line and flexed just beyond the right angle, there being no abnormal lateral or antero-posterior mobility whatever. The author had not discovered any other case in which these ligaments had been re paired, which he trusted was a sufficient excuse for his recording a single case.

The President commented on the fact that such strong non vascular structures could be ruptured in this way. He questioned the advantage of opening the joint when actively inflamed if that course could be avoided, and he related an illustrative case. He also referred to the case of a lad whose knee after the injury was in a flail-like condition, but six months later the joint was found to be fairly serviceable.

Mr. W. G. **Spencer** doubted whether such strong ligaments could be quite ruptured, and whether, if that were the case, the attachment by scar tissue would be sufficiently strong. In many cases, moreover, a plate of bone was torn away together with the ligament.

Mr. **Mayo Robson**, in reply, concurred in the general view not to operate upon joints in a state of acute inflammation. In his own case the limb was absolutely useless nine months after the accident, and the only alternative would have been amputation.

Lieutenant-Colonel W. K. **Hatch**, I.M.S., read a paper on

HEPATIC ABSCESS,

of which he said he had exceptional opportunities of treating. Altogether, in the Sir Jamsetjee Hospital and in private practice, he had seen upwards of 1,000 cases of this disease. He pointed out that the disease was common enough among natives, and, though alcohol was a factor, the majority had suffered from dysentery. In discussing the diagnosis, he insisted on the strong hepatic odour which emanated from the patient. Sometimes percussion gave a resonant note over the abscess, due, no doubt, to the passage of gas from the neighbouring colon. If situated near the middle of the liver, near the ensiform cartilage, pulsation might be propagated from the aorta, thus complicating the diagnosis. He wished particularly to call attention to the fact that aspiration was attended with a certain amount of danger, and ought, in fact, only to be employed when the diagnosis had been established, and it only remained to determine the precise locality of the abscess. The danger lay either in puncturing an enlarged and highly congested liver or in wounding a large hepatic vessel. Dangerous and even fatal hæmorrhage might thus be caused, in some instances from puncture of the vena cava. His practice was to open the abdomen by a two-inch incision, exposing the liver, which enabled him to introduce the canula with greater safety. In a case to which he referred, hæmorrhage followed which ceased on manual pressure, but the patient died. As regards surgical treatment he thought incision was unquestionably the proper treatment, and the earlier the better, though it might be well first, in large abscesses, to draw off part of the pus, making the incision a day or two later, thus lessening the chance of its becoming septic. He preferred to open between the ribs rather than below them. Even in cases where the abscess contents were being expectorated he preferred to incise. He deprecated removal of ribs as quite unnecessary. He never irrigated the abscess cavity unless it became septic. The mortality in hospital practice was high—in 1897 as high as 97 per cent.

The **President** asked whether the author had made use of the method of diagnosis by leucocytosis. He commented on the fact that the author apparently did not attach much importance to cutting into the abscess through the peritoneum, a procedure which was usually held to entail considerable risk. He himself, under such circumstances, preferred to expose the abscess and pack gauze around the presenting part, so that in the course of a day or two adhesions might form and so shut off the peritoneal cavity, and he mentioned a case in which he had adopted this procedure with success.

Mr. **Bowlby**, in some remarks on the subject of attacking these abscesses through the pleura recalled that it had been alleged that as the pus was sterile there could be no objection to allowing it to escape through the pleura, but he thought it was generally held to be desirable to shut off the pleural cavity. Even if the pus were originally sterile it probably did not remain so.

Mr. **Mayo Robson** (Leeds) said the author had done good service if only by calling attention to the risks of indiscriminate blind exploration. This was still very widely practised. The exploration of suspected distended gall-bladder, he trusted, was a thing of the past. It was much safer in abscess of the liver to open the abdomen when they could see what they were doing, and could the more easily arrest bleeding if required. He did not feel sure that it was always desirable to perform the operation *en deux temps*, because that prevented their exploring the region in order to find out whether other abscesses were present. When exploring the liver he preferred to pack the wound with sponges, and if pus were found it could be evacuated before making a free incision He therefore either made a free incision into the peritoneal cavity or else excised a rib or two in which case he certainly preferred to stitch the two pleural surfaces together to prevent the pus entering the pleural cavity.

Dr. **Longhurst** expressed surprise at learning that abscess of the liver was so common among the natives of India and asked how the author explained this circumstance?

Dr. **Busch** said that during the last ten months he had opened four abscesses through the pleura, in three he had made an exploratory aspiration, and immediately afterwards he had excised a few ribs, stitching the pleura to the diaphragm. Two recovered without any trouble, the third did well for a month, but then became maniacal and died. In none of these three cases was there any trouble with the pleura. In the fourth case there had been a great many aspirations, and no doubt the needle had been pushed through the pleural cavity, that patient developed an empyema from which he died. He pointed out that aspiration on suspicion of abscess of the liver might be attended by serious consequences.

Mr. **Stephen Paget** asked what was the risk if they opened the abscess freely? On two occasions he had found it useful to pass a silver director down towards the syringe, and then with a probe-pointed gorget, pushing aside the liver tissue, thus minimising the risk of wounding a vein.

Lieut.-Colonel **Hatch**, in reply, said he had not resorted to leucocytosis for diagnostic purposes. He thought there was a positive advantage in not pushing the surface of the liver away from the abdominal parietes. He had never met with any bad results from the passage of the pus into the peritoneum, nor had the pathologist to the hospital recorded any evidence of peritonitis from that cause. Beyond some dyspnœa he had not seen any danger from opening through the pleura, and he did not specially suture the pleura to the surface of the thoracic wall. His object was to show that great care should be used in exploring, particularly in the cases in which there was no abscess at all, since it was in those cases that it did most harm. In view of the extreme disagreeableness of expectorating the pus of a hepatic abscess he would not hesitate to operate in such cases.

Mr. **Lawrie McGavin** read notes of a case of "Strangulated Hernia with *Reduction en masse*," which will be found on page 599.

Mr. E. G. L. **Goffe** suggested the use of a local anæsthetic in such cases, such as eucaine, &c. He had witnessed very good results therefrom.

Mr. W. G. **Spencer** observed that taxis was largely resorted to, and, perhaps, one only heard of the successful cases.

Mr. **Bowlby** observed that many cases of *reduction en masse* were cases in which the taxis had been applied by the patient or his friends. He had never seen a case in hospital in which it had followed taxis applied there. It was quite possible that the measure of force applied by people outside the hospital may have been beyond anything that was reasonable and right. He opined that it would lead to considerable loss of life if taxis were quite abandoned. Even if the mortality from operation were only 10 per cent., as alleged, the mortality of taxis applied within twenty-four hours would not be nearly as much, for in the majority of cases it was reduced with a minimum of force, and a reasonable amount of force was probably quite safe.

Mr. H. **Symonds** (Oxford) said that as the surgeon of a county hospital for twenty years he had always forbidden taxis to be applied, preferring to operate forthwith. The damage was done in cases in which there was no omentum in the sac, in which event a comparatively small amount of pressure might do great harm.

Mr. **Openshaw** agreed that in femoral hernia, hernia with a tight neck, cases in which there was marked collapse and in which the symptoms had lasted some time, taxis was inadvisable. Nevertheless, he himself applied taxis in some cases and not without success. He had not seen more than one or two cases in which taxis had done harm.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Medicine.

Meeting held Friday, November 21st, 1902.

President, Dr. A. V. **Macan**, in the Chair.

Dr. **Finny** read the notes of a remarkable case of

ERYTHEMA MARGINATUM PERSTANS

in a lad, æt. 21, who had been under his care in Sir Patrick Dun's Hospital for the last five weeks. The case presented two prominent features (1), of having lasted off and on for over three years, and (2), of the curious marginate lines the disease assumed. Hence he described it as Erythema Marginatum Perstans. The eruption, for which no cause could be assigned, occurred suddenly, with a sensation of malaise, and came out first on the thighs, knees, and trunk; lately spreading more on the arms to the wrists, and on the legs to the dorsum of the feet. It has spared the face, scalp, and upper part of the neck. When appearing it is itching and tingling somewhat like a hive, but the itching is slight as a rule. The eruption presents a polymorphism found in erythema multiforme—papules, circles, segments, gyrated patches, and long lines, erythema marginatum. The lines are chiefly found on the thighs and near the axilla on the thorax and upper arm, and present curious devices. The eruption is pinkish-red, red, or reddish-brown. Its mode of growth can be readily studied, commencing as a papule the size of a small pea, smooth, non-vesicular; it rapidly spreads peripherally, and in three to four days forms a circle, the centre being of the normal skin hue, while the encircling raised margin widens out. Should it meet another similar circle, the meeting arcs break down and a gyrate irregular body is the result. Again, one side of the circle may disappear, and the remaining coloured rim may end in long, wavy, or hooked lines, the terminals being as sharply raised above the skin as the rest of the line. In a very few instances a little vesiculation was detected, due to rubbing or scratching. There were no examples found of "erythema iris" or "erythema nodosum." The diagnosis lay between erythema multiforme and eczema dermatitis herpetiformis, urticaria, and the gyrate forms of psoriasis. The distinguishing features were discussed, and reference was then made to the rarity of the disease, as judged by the reticence of or slight passing mention made in, the standard works on diseases of the skin (including Stelwagon's, vol. 1902) on this particular variety, and with the exception of three instances, which showed a very limited distribution of erythema gyratum of a lasting duration, there were no references to or exhibits of it in the volumes of the *American Journal of Skin Diseases* or in the records of the Dermatological Society of Great Britain. There was one unusual symptom present, namely, enlargement of the glands in the groin and axilla. No special treatment seemed to do good, though the improvement which has followed a course of thyroid extract may justify its use as a therapeutic agent of some value.

Dr. **Walter Smith** said he had never seen a parallel case, but showed an illustration, published by Dr. Fox in the International Library of Rare Skin Diseases, which was almost a reproduction of Dr. Finny's illustration. His own inclination was to refer the case to erythema multiforme, but the boundaries of the erythema group were very badly defined. Accounts published by experts of diseases classed under erythema multiforme led to great confusion. There were two features to be noted in the case (1), the serpentine, gyrate outline; and (2) its persistency and rebelliousness to treatment. He referred to a case which he had had in the Adelaide Hospital, in which the gyrate outline was very well shown: several of the rings of erythema were tipped with vesicles and conjoined with vesication; no one hesitated to class it as erythema multiforme. Referring to its persistency, Dr. Smith quoted a pair of cases of the affection which had occurred in a brother and sister, in which the eruption persisted for a considerable time; the cases were evidently similar, the eruption beginning with papules, then going on to patches, circular, annular, and gyrate.

Dr. **Wallace Beatty** said he had never met a case like Dr. Finny's, and referred to the figured eruption which is seen in cases of psoriasis, a figuration which resembled that seen in the case they were discussing.

Dr. **Doyle** described a somewhat similar case.

Dr. **Finny**, in the course of his reply, said he was inclined to try large doses of quinine.

Dr. R. **Travers Smith** read a paper on a case of

PAROXYSMAL TACHYCARDIA ASSOCIATED WITH EPILEPSY,

which will be found on page 597.

Dr. **Finny** thought with Dr. Smith that the tachycardia and the epilepsy were allied in this case.

A CASE OF LYMPHADENOMA WITH RECURRENT PYREXIA.

Drs. **Bewley** and **Scott** described the above case. A gentleman, æt. 35, suffered from a mild attack of typhoid fever with two relapses, which lasted from October, 1900, till the end of January, 1901. In March of the same year he again developed a high temperature. The fever ran a severe course, being accompanied by delirium and much weakness. For it no cause could be discovered; all the viscera, the blood, urine, &c., were normal on examination. The fever lasted six weeks and ended by crisis. A third attack of high fever lasted from the middle of May till the end of June. A fourth attack commenced early in November and lasted three weeks, when the patient died of heart failure. The first attack was proved by Widal's reaction to be enteric; but in the other three attacks there was no abnormality to be found by any mode of examination, and no diagnosis could be made. The blood count in November, 1901, was: Red corpuscles, 3,725,000; white corpuscles, 6,200; hæmoglobin, 37 per cent. At the autopsy a mass was found in the mediastinum lying above the heart, about four by five inches in size, consisting apparently of enlarged lymph glands fused together. There were a few secondary nodules in the lungs and abdominal organs. The spleen was enlarged, and contained some firm pale-coloured masses. These tumours were composed of fibrous tissue, with a few lymph cells lying between the bundles. No microbes could be detected anywhere. In a considerable number of cases of lymphadenoma recurrent pyrexia has been observed. It has by some observers been attributed to the presence of micro-organisms, while others have thought that some chemical toxin formed by the lymphomatous masses was the cause of the pyrexia.

LIVERPOOL MEDICAL INSTITUTION.

Meeting held Thursday, November 20th, 1902.

The President, **Rushton Parker**, Esq., B.S., F.R.C.S., in the chair.

Mr. **Bickerton** showed a case of Symmetrical Corneal Opacities, which was commented upon by Drs. **Grossmann** and **Barendt**.

Mr. R. W. **Murray** related the case of a lad, æt. 16, upon whom he had operated in April last, for what was thought at the time to be subacute appendicitis. The operation revealed a strictly limited hyperplasia of the cæcum and adjacent portions of the ileum, with a small abscess, probably glandular, behind the cæcum. The abscess was drained, and ten days later a fæcal fistula formed. In July, as the general health was failing, Mr. Murray opened the abdomen away from the affected area, and short-circuited the intestine, joining ileum to transverse colon. end to end, by simple suture. The fæcal fistula closed, but the patient's general condition was still far from satisfactory. In this case, one probably of tuberculous hyperplasia of the cæcum and ileum, Mr. Murray thought excision of the diseased portion of the intestines impracticable.

Dr. W. **Blair Bell** gave the early history of the case, and could not agree with Mr. Murray as to the nature of the condition. In Dr. Bell's opinion it was not tubercular.

The President, Mr. Monsarrat, and G. G. Hamilton spoke, and Mr. **Murray** replied.

Dr. **John Hay** showed a man, æt. 38, suffering from the tonic form of progressive muscular atrophy, which had commenced four months after an attack of lobar pneumonia.

Dr. T. R. **Bradshaw** remarked that the case was the type commonly known as amyotrophic sclerosis, more often seen in women, and running a much more rapid course than the purely atrophic cases.

Dr. **Macalister** and Dr. **Bradshaw** read a paper on the

INFLUENCE OF SMALL DOSES OF SALICYLIC ACID ON DIGESTION AND NUTRITION, WITH SPECIAL REFERENCE TO ITS EMPLOYMENT AS A PRESERVATIVE IN FOOD.

Evidence had been given in various courts and in Parliamentary Committees which was of the vaguest description, depending less upon actual observations upon the results of taking salicylic acid itself than upon the results of taking other antiseptics. It had been argued that salicylic acid was ten times stronger than carbolic acid, with the view to proving that it was more injurious, which was obviously absurd. They considered that the recommendation that not more than one grain per pint of the acid might be used was made without any foundation in evidence that the quantity was generally quite inadequate as a preservative, and that the recommendation was unsatisfactory because it made no distinction between the various substances it was intended to preserve, and the various quantities in which they were likely to be consumed. The writers were strongly of opinion that the nature and amount of preservative employed ought to be stated on the label. They had found that it was contended that salicylic acid was injurious for three principal reasons:—1. That it was antiseptic and anti-fermentative and therefore liable to interfere with the digestive processes by destroying the digestive ferments. 2. That after absorption it was apt to injure the general health and to interfere with nutrition. 3. That it was an irritant and therefore apt to injure the mucous membranes of the stomach and intestinal canal. They had reason to believe that many who were opposed to the use of salicylic acid on the first ground did not distinguish between true digestion and decomposition. The writers had made numerous experiments on artificial digestion and they found that the presence of salicylic acid even in saturated solution had about the same effect in retarding peptic digestion as the same proportion of kitchen salt. In pancreatic digestion of starch it seemed to have no retarding influence at all after neutralisation. As regards the second objection, one of them had taken 5 grs. of salicylic acid daily for a month without any ill effect on the health; they had given it to children in fruit juice preserved with it, and they had watched its effects on other persons, and they found that it exerted no recognisable bad effect whatever. As regards the objection that salicylic acid was an irritant to the mucous membrane, they denied that it could be so in any such degree of concentration as it was possible to obtain it, either in food or in the stomach contents. They maintained that salicylic acid as an antiseptic was of the greatest value to the poorer classes in towns by enabling them to obtain luxuries such as non-alcoholic wines free from the risk of decomposition, and at a moderate cost, and thus enabled the public to obtain cheap, wholesome, and agreeable beverages, free from the risk of moral and physical evil which attended the use of alcohol drinks. They challenged the opponents to bring forward a single instance in which it could be shown that bodily harm had resulted from salicylic acid employed as a preservative, and they denied that it was possible for anyone to be injured by it in the proportion in which it existed in any of the preserved articles which had been brought to their notice.

Mr. F. T. **Paul** had supported the Medical Officer of Health in his endeavour to check the excessive use of salicylic acid as a food preservative on the grounds that (1) chemical preservatives were undesirable, (2) salicylic acid was a poison, (3) it was unnecessary to preserve the articles in which it was used. The first was an opinion shared by most medical men. The second point had been sufficiently proved at the time salicylic acid was largely given for acute rheumatism, and he referred members to a paper he read before the Society in 1876. As regards the third, it was admitted by the manufacturers of the fruit juices that they only used large quantities of salicylic acid in order to prevent alcoholic fermentation, and the consequent presence of minute chemical traces of alcohol repugnant to the teetotaller; otherwise one or two grains to the pint would be sufficient. The other food substance for which salicylic acid was so largely used was bottled fruit, the flavour of which it completely destroyed. Heat sterilisation in this case was alone necessary, as he had proved by extensive experiments. He agreed with other speakers that so small a quantity as 1 or 2 grs. to the pint was probably harmless, and need not be objected to if stated on the label.

Mr. **Bickerton** could not understand speakers denouncing salicylic acid as a "poison." He and his family had during the summer months drunk the special preparation around which controversy had raged—"Patterson's Raspberry Fruit Juice"—with no appreciable effect one way or the other. He understood it had contained 19 grs. to the pint; a little of the juice only was used at a time in a tumblerful of water or soda water. The proof of the pudding was in the eating. Salicylic acid in the strength above mentioned had neither done harm to himself nor his children, nor had he seen any ill effect produced on patients to whom he had prescribed it. As to the reported injurious effects on the mucous membrane of the stomach, he doubted it. It was quite possible the symptoms of irritation were due, not to the drug itself, but to impurities in its manufacture. He had applied a saturated solution of salicylic acid to his own eye, and it had no effect whatever, not even causing smarting or watering.

Professor Moore, Drs. Barr, Grünbaum, Buchanan, and Mr. Damer Harrisson spoke, and Drs. **Macalister** and **Bradshaw** replied.

Mr. G. G. **Hamilton** described a method for removing foreign bodies from the œsophagus. The main point lay in going in search of the coin whilst the X-rays were being used. Thus accurate adjustment of coin and coin-catcher was possible.

GENERAL MEDICAL COUNCIL.

SEVENTY-FIFTH SESSION, NOVEMBER, 1902.

Sir W. Turner, President, in the Chair.

FIRST DAY.—Tuesday, November 25th.

Presidential Address.

Sir William Turner stated that no change had occurred in the *personnel* of the Council since the last meeting. By the passing, on July 31st, of the Act to secure the better training of midwives and to regulate their practice, statutory recognition had been given in England and Wales to an order of obstetric practitioners who had not hitherto had a legal position and title. After drawing attention to certain of the provisions of the Act, he said that he understood that the Central Midwives Board was now fully constituted. The General Medical Council was to take no part in the formation and administration of that Board, and its duty under the Act was restricted to that of making representations with respect to the rules framed by the Central Midwives' Board before those rules were approved by the Privy Council. So far as the General Council was concerned, the midwives' question, which for so many years had occupied much of their time and attention, need no longer find a place in their programme of business. Under the Midwives Act, and in association with the legal recognition of midwives, from which Scotland and Ireland were expressly excluded by statute, Parliament had delegated to the English Branch Council special powers to act for a specific purpose, as if it were the General Council. A new departure had therefore been made in medical legislation, and an independence of action had been granted to the English branch such as had not been conferred on the other branches. Each of the constituent provinces of the Dominion of Canada had, as regarded regulations affecting medical practice, been independent of its neighbours, so that a qualification granted in one province had not empowered the person holding it to practise in the other provinces. During the last few years leading members of the profession in Canada had considered the advisability of doing away with such restrictions, and of obtaining a Medical Act applicable to the whole Dominion, and framed generally on lines similar to the Medical Act of 1858, which granted equal rights to practise in the three divisions of the United Kingdom to holders of qualifications obtained in any one of them. On May 15th last, by the Canada Medical Act, 1902, a Medical Council of Canada was constituted. The purposes of this council were to establish a qualification such that the holders thereof should be empowered to practise in all the provinces of Canada; to establish and maintain a board to examine and grant certificates of qualification; to establish a Canadian register of medical practitioners: and to determine and fix the conditions and qualifications necessary for registration. But the Act also contained sections which had a special interest to the Medical Council of the United Kingdom. Under section 4 (e) the Canadian Medical Council was empowered to establish such a status of the medical practitioners in Canada as should ensure recognition thereof in the United Kingdom, and enable Canadian practitioners to acquire the right to registration unde the Medical Acts of the Imperial Parliament. The Canadian Medical Council might make regulations so that licences granted by any British, Canadian, Colonial, or foreign licensing body or authority should be recognised and authorised to arrange for a scheme of reciprocity as to registration, and the terms and conditions upon which medical practitioners duly registered or licensed under the Medical Acts of the United Kingdom should be entitled to registration in Canada. The regulations under this section of the Canadian Medical Act did not take effect until they had been approved by the Governor in Council. When these provisions of the Canadian Act had been complied with, Part II. of the Medical Act of 1886 would become applicable to Canada, should it appear that Canada afforded to the registered medical practitioners of the United Kingdom such privileges of practising as might seem just. Canada would thus be placed on the same footing as India, Malta, and the sister colonies of New Zealand and Australia, and another step would be taken in the consolidation of the British Empire. As a further indication of the activity displayed in the Colonies in the establishment of medical boards, and in the recognition of the right to practise by those whose names were on the *Medical Register* of the United Kingdom, he mentioned that the administrator of the Orange River Colony had issued a proclamation similar in its terms to that issued early in the year for the Transvaal. The inspection of the final examinations of the English Universities, and of the medical and surgical corporations in Ireland, had been in progress during the year. Only Cambridge University now remained to be visited. The Council had received from the Royal Colleges in London information supplied by the examining board in response to questions put by the Council as to the courses of study in chemistry, physics, and biology at teaching institutions recognised by the Royal College, but not approved by the Council. The executive committee had directed that the answers given by these institutions should be printed and circulated for the information of the members of the Council. The Education Committee would present a report on the results obtained by raising the standard of the preliminary examinations conducted by the College of Preceptors in England, the Educational Institute of Scotland, and the conjoint board of the Royal Colleges of Physicians and Surgeons in Dublin. The same committee would also report as to the answer given by them to the British Medical Association on the questions appertaining to preliminary education raised by the deputation of members of that association which was received by the Education Committee on behalf of the Council during the May meeting The proceedings of the international conference for the unification of the Pharmacopœial formulæ of potent drugs and preparations, held at Brussels in September last, had been reported on by the chairman of the Pharmacopœia Committee, who, by the authority of the Council, was nominated as a delegate thereto. Eighteen European Governments and the United States of America were represented by specially-appointed delegates, the British representatives being Dr. MacAlister, nominated by the Council, and Surgeon-Lieutenant-Colonel Reid, nominated by the Government of India. Certain important conclusions were unanimously adopted, with the object of eliminating, by means of an international agreement, the dangers to life and health arising from the wide differences which existed in the various national Pharmacopœias as regards the potency and strength of dangerous drugs called by the same or similar names. It was further resolved to request the Belgian Government, which had so laudably interested itself in this question, to establish in Brussels an international bureau of information and intercommunication, with the purpose of promoting uniformity of action among the authorities which control the Pharmacopœias of the countries represented at the conference. Dr. MacAlister's report would be referred to the Pharmacopœia Committee for consideration; meanwhile, he had received from the Lord President of the Privy Council an expression of thanks for his services as the representative of the British Government. In conclusion, he expressed regret at the fact that several practitioners had had to be summoned to appear before the Council for the investigation of charges brought against them—two being in respect of criminal convictions and the others for alleged professional misconduct.

Dr. **McVail** said that Dr. MacAlister and the President deserved great credit for having caused to be inserted in the Midwives Act the clause which made it penal after April 1, 1910, for any woman habitually and for gain to attend women in childbirth otherwise than under the direction of a qualified medical practitioner unless she was duly certified under the Act.

On the motion of Dr. **MacAlister**, seconded by Mr. **Bryant**, the thanks of the Council were voted to the President for his address, which was ordered to be entered on the Minutes.

After receiving *in camera* a report from the executive committee in regard to certain applications for the restoration to the *Medical Register* of names removed under section 29 of the Medical Act, 1858, the Council adjourned.

SECOND DAY.—Wednesday, November 26th.

Sir **William Turner**, President, in the chair.

Before proceeding with the ordinary business, Sir **Victor Horsley** obtained leave to give an explanation with reference to a statement made by Dr. McVail on the previous day. That statement, which was inaccurate, had been reported in the *Times*, and he wished to correct it in the interests of the British Medical Association. Dr. McVail had stated that the special clause in the Midwives Act which gave that Act a sense of reality, and not that of a sham, was due to certain members of that Council by their interest and work when the measure came before the House of Lords. None of those statements were altogether correct. The penal clause to which Dr. McVail made reference was drafted by the British Medical Association six years ago. It was brought by the British Medical Association under the notice of the promoters of the Bill. They embodied it in their Bill of 1901, but they left it out of their Bill in 1902. When they introduced the Bill into the House of Commons the British Medical Association through its committees again brought the matter forward, and by the assistance of Mr. T. P. O'Connor and Dr. Ambrose procured the insertion of the clause while the Bill was passing through the House of Commons.

Dr. **McVail** said that what he said was not meant to imply that no others in the profession had taken an interest in the matter. All that he said was within his knowledge—namely, that two of the principal members of the Council had taken an exceedingly important part in it, and he expressed his opinion, which he still held, that but for their action the matter would not have been given effect to.

Sir **Victor Horsley** said that Dr. MacAlister's points were founded entirely on the report of the Midwives Bill committee of the Council presented in April, 1898.

The Council was occupied for the remainder of the day with the consideration of disciplinary cases.

Alfred Hunter Goodwyn, L.R.C.P., L.R.C.S.Ed., L.F.P.S.G.

Mr. Alfred Hunter Goodwyn, of Budleigh Salterton, Devon, was brought before the Council, having been sentenced to a term of imprisonment for stealing jewellery. It was urged for the defence that he was not engaged in the practice of his profession at the time and that he had only been guilty of "larceny as a bailee," and that he was not really accountable for his actions.

After deliberating *in camera* the Council ordered his name to be erased from the *Medical Register*.

James William Ayres, L.R.C.P.Ed., L.S.A.

Mr. J. W. Ayres, of Liverpool, came before the Council in consequence of his having been sentenced to four months' imprisonment for manslaughter. He appeared in person and read a statement, in which he narrated the circumstances and urged that the occurrence was of the nature of an accident. The deceased man had, it seems, come to his surgery in a state of drunkenness and had declined to leave when ordered to do so Mr. Ayres consequently ejected him. Finding that the man had left his hat he took it out to him, and in a scuffle that ensued the man fell and struck his head against the kerb. He was taken home, but was not undressed or medically attended for six days, when he was removed to the hospital, where he died ten days later. Post-mortem a fracture of the sphenoid bone was discovered, but there was also advanced kidney and mitral disease. Mr. Ayres urged that the fracture might very well have been caused by his falling off the sofa, and appealed to the Council not to condemn him to what he said would be a "living death."

After a long deliberation *in camera* it was announced that the Council did *not* see fit to remove his name from the *Register*.

In another case, as the defendant is actually under restraint in an asylum, the Council decided not to proceed further with the inquiry.

Edward John Smith, M.R.C.S., L.S.A.

Mr. E. J. Smith, Balsall Heath, Birmingham, was summoned to answer a charge of having sought to attract practice by a system of extensive public advertisements of a character discreditable to a professional medical man.

Mr. Smith appeared in person, attended by his counsel Mr. Shultless Young. The case for the Medical Defence Union was conducted by Dr. Bateman.

Dr. **Bateman** described the case as one of systematic canvassing, touting, and advertising. The defendant had been written to in April, 1902, informing him that complaints had been made, and asking whether certain circulars had been issued by his authority, but no reply was received. A subsequent letter also failed to elicit a reply, whereupon the matter was brought before the Council.

Mr. **Smith** entered the rostrum, and admitted having sent out the circulars in question. They were sent out at a time when he was making between 150 and 180 visits a week, and they were sent out purely as a matter of charity, and, as a matter of fact, he lost money thereby. The circulars were only given to the very poor, and in the first instance the invitation was gratuitous. Last winter was the third winter he had issued these circulars. He complained that his letter to the Registrar of the Council had remained without a reply for four months, whereas an immediate reply would have enabled him to explain everything.

The **President** pointed out that he had been written to on June 16th, and had not replied, on which the defendant said that until he received the particulars in October he did not know what the charge was. He found he could not afford to attend these poor people for nothing, so had made a charge of threepence. His idea in imposing the charge of threepence was to limit the numbers.

After replying to various questions the defendant gave place to his counsel, who urged that there was a fair presumption that Mr. Smith did not intend to advertise at all. He had entirely confined his circulars to the very poor, from whom he expected no return, and he urged the Council not to discourage Mr. Smith from giving gratuitous treatment to the poor and suffering. If, however, the Council were of opinion that the practice was objectionable Mr. Smith would discontinue it.

Dr. **Bateman** pointed out that Mr. Smith had "ground baited" the district for two years with offers of gratuitous treatment, and had then issued his "threepenny circular." He urged that this conduct was "infamous in a professional respect."

After deliberating for a long time *in camera* the **President** announced to Mr. Smith that the charges brought against him had been proved to the satisfaction of the Council; that they took a very serious view of his conduct, and that, in order to give him an opportunity of reconsidering his position, they had adjourned the further consideration of the case until next Session, when he would have to appear and satisfy the Council as to his conduct in the interval.

THIRD DAY—THURSDAY, NOVEMBER 27TH.

Sir WILLIAM TURNER, President, in the Chair.

This was a *dies non* so far as the public business of the Council was concerned. The whole afternoon was devoted to an inquiry conducted *in camera*, with the concurrence of the defendant, into the conduct of William Arthur Jones, L.S.A., L.R.C.S.I., of Albany Road, S.E. The charge bore on the alleged criminal action of the defendant in procuring abortion in two specified instances.

After deliberation, the President announced that Mr. Jones had been adjudged guilty of "infamous conduct in a professional respect," and that his name had been ordered to be erased from the *Register*.

The Council then adjourned.

FOURTH DAY.—FRIDAY, NOVEMBER 28TH.

Sir WM. TURNER, President, in the Chair.

Sir VICTOR HORSLEY asked the President why no observations have been received from the Royal College of Surgeons of England and the Royal College of Physicians of London upon the Report of the Visitor and Inspector on the first examination of the Conjoint Examining Board in England furnished to the Licensing Bodies on October 7th, 1902.

The PRESIDENT said he was unable to give the information asked for, but referred him to Mr. Bryant on behalf of the Royal College of Surgeons and to Dr. Norman Moore on behalf of the Royal College of Physicians. These gentlemen stated that the matter was under the consideration of their respective Colleges, and that as soon as the report was complete it would be forwarded to the Council.

Dr. NORMAN MOORE asked whether any arrangements would be made during the present session as to the continuation of the visitation of the examinations in chemistry, physics, and biology held by the several licensing bodies, which on February 26th, 1902, it was resolved to carry out.

The PRESIDENT replied that no persons had been appointed to report on the primary examination.

Sir VICTOR HORSLEY called attention to a new synopsis issued by the Conjoint Board which was to come into force in May, 1903, and of which the Council was not officially informed.

Dr. NORMAN MOORE said that all alterations in regulations were submitted to the Council, but the synopsis was not yet in print.

REPORT OF EXECUTIVE COMMITTEE.

The Council continued *in camera* the consideration of a report from the Executive Committee in regard to certain applications for the restoration to the *Medical Register* of names removed under Section XXIX. of the Medical Act (1858). On readmission of the public the President announced that the Council had adopted the recommendation of the Executive Committee to remove the qualification of M.R.C.S.Eng. appended to the name of George Pearse Sargent from the *Register*, his membership having been determined by the College for advertising.

Mr. Sargent is still registered as L.F.P.S.G., M.D.St. And., and L.S.A.Lond.

THE PREVENTION OF PERSONATION.

The Council proceeded next to consider the report from the Committee for Prevention of Personation, and Sir VICTOR HORSLEY observed that Dr. MacAlister had made a very important suggestion in reference to the identification of practitioners and students—viz., that in addition to the forms of application being written in the handwriting of the applicant, they should also contain the date and place of his birth.

When Schedule I. came to be discussed Dr. BENNETT suggested that some term other than "Christian name" be used, since this, he suggested, might be objected to by Jews. The President advised "prénom." Among other substitutes suggested were "forename," "personal name," "individual name," "additional name." The President remarked that in Edinburgh, where there were a great many Indian students, it was difficult to tell where their names began and their titles ended.

After some discussion it was decided that the heading "Christian and surname" should be removed from the schedule, and in lieu thereof the term "full name" employed. Recommendations were then agreed to by the Council to the effect that (1) No registration on the *Students' Medical* or *Dentists' Registers* shall be effected unless application be made upon forms supplied by the Registrar. (2) That all forms of application for registration, duly signed, shall be preserved by the Registrar of the Branch Council in such manner as to be easily accessible for reference. (3) That all applications for restoration to the *Medical or Dentists' Register*, or for registration in these *Registers* under exceptional circumstances, shall be accompanied by a statutory declaration furnished upon a form supplied by the Registrar.

The report was adopted, and the PRESIDENT thanked Sir Victor Horsley for having brought it to a satisfactory conclusion.

The next item of business was the report on the case of James Dixon Goy by the Dental Committee. An inquiry was held on November 22nd, 1902, at which Mr. Goy did not appear personally or by representative. It having been established that he had used the qualification L.D.S., R.C.S., without any right, his name was directed to be removed from the *Dentists' Register*.

FIFTH DAY.—SATURDAY, NOVEMBER 29TH, 1902.

Sir WM. TURNER, President, in the Chair.

The Council proceeded to discuss the proposed

MEDICAL ACTS AMENDMENT BILL.

This Bill has for object the carrying out of the financial reforms recommended by the Financial Relations Committee. The Bill provides for the receipt and administration of all funds and the appointment and payment of all officers by the General Council (except that the Registrars of Branch Councils are to be appointed on the nomination of the Branch Council), for an increase of the fee payable on registration and for the payment of a fee by students for entry of their names in the *Students' Register*.

Sir VICTOR HORSLEY moved (seconded by Sir Christopher Nixon) that a report be prepared of the financial position of the council to be submitted to the Privy Council. Thereupon Dr. NORMAN MOORE rose to object, urging that before asking the public for more money the Council ought to prove that economies could not be effected. He went on to say that if, instead of five guineas a day members of the Council were paid three guineas or nothing at all, the public would look upon that with complacency, and the members might do so with propriety.

Dr. MCVAIL pointed out that it was premature to discuss the matter, and moved as an amendment that the consideration of the motion be postponed.

It was then moved by Sir VICTOR HORSLEY, and seconded by Sir CHRISTOPHER NIXON, that the Council should go into committee to consider the clauses of the draft of the Bill. Sir Victor explained that all the proposed alterations had one object in view, viz., that of the consolidation of the Council's finances.

The second clause of the Bill provides for the lack of income by raising the registration fee from the previous sum of £5 to a sum not exceeding £10. Clause 4 had for object to obtain statutory authority to compel the registration of students, the fee on registration of a student to be £1.

Moved by Sir VICTOR HORSLEY, and seconded by Sir CHRISTOPHER NIXON, and subsequently carried, that Sub-clause 1 of Clause 1 read: "that the General Council may from time to time appoint such person as it shall think fit to be Registrar of the General Council, and may remove any person so appointed."

Sir VICTOR HORSLEY, seconded by Sir CHRISTOPHER NIXON, moved the adoption of Sub-clause 2: "That each Branch Council may from time to time nominate a person to be appointed Registrar of the Branch Council; and the General Council, if it approve of the person so nominated, shall appoint him to be Registrar of the Branch Council. The Registrar of a Branch Council may be removed by General Council.

Dr. MCVAIL objected to the sub-clause on behalf of the Scotch Branch Council, on the ground that it was a slight on the Branch Council, and that the latter should have the right to appoint its own Registrar.

Sir VICTOR HORSLEY pointed out that the body which paid the salary should have the right to veto the nomination, though of course this was not likely to happen.

Dr. LITTLE expressed surprise that a practical Scotchman should object to such a sensible arrangement.

Dr. BENNETT, speaking as President of the Irish Branch Council, agreed with Dr. McVail, and suggested that they should do away with the Branch Councils, as their *raison d'etre* was being taken from them.

Sir CHRISTOPHER NIXON suggested a way out of this difficulty by giving the Branch Council the right of suspension.

Dr. ATTHILL reminded them that the General Council was powerless to force on the Branch Council a Registrar not approved of by that body.

After some further discussion the sub-clause was agreed to in its full and amended form:—"That the Registrar of the Branch Council may be suspended by the Branch Council and removed by the General Council."

Sub-clause 3, dealing with the appointment of the treasurer of the General Council and his tenure of office was carried, but Sub section 4, bearing on the appointments of additional officers, including clerks or servants, was postponed, in order that the legal adviser of the Council might be consulted. Sub-clause 5, providing for the payment of salaries, was then adopted.

Discussions on Sub-section 6 postponed till Monday, when the Council can confer with Mr. Muir Mackenzie.

In reference to Clause 2, the main object of which is the centralisation of all funds of Branch Councils into one general fund, that of the General Council, Dr. McVAIL urged that making the three funds into one would not increase the amount at their disposal. Where real economy could be effected, he observed, would be by delegating to the Branch Councils some of the work at present done by the General Council; in this way the latter might conceivably be enabled to complete its business in three days.

Dr. ATTHILL asserted that no members would sit for the Branch members' fee of two guineas. He pointed out that the Irish Branch Council had no funds at its disposal, so that when Dr. McVail referred to the three funds being made into one he must have overlooked the difficulty of transferring nothing.

In reference to the clause respecting the proposed increase of the registration fee to a sum not exceeding £10, Sir VICTOR HORSLEY pointed out that the sum need not necessarily be £10; it might be something under, say, £7. This was agreed to. The Council adjourned till Monday.

France.

[FROM OUR OWN CORRESPONDENT.]

PARIS, Nov. 30th, 1902.

ABDOMINAL AORTITIS.

PROF. TEISSIER spoke before the Clinical Society on inflammmation of the abdominal aorta as first described by Prof. Potain three or four years ago. After relating the cases of some patients treated in his hospital service, the speaker passed in review the etiology and symptomology of the affection. Primary or idiopathic aortitis were exceptional, yet cold might constitute a factor. The aortitis was most frequently *propagated*, that is to say, consecutive to an extension of inflammation affecting the upper section of the artery or that of a neighbouring organ (kidney, biliary vesicle, and, above all, the intestines). Infection, such as that of *grippe* or tuberculosis, could certainly be considered as a direct cause. Typhoid fever, syphilis, malaria, or saturnism have been incriminated, but he had not met with a case that could be fairly attributed to any of these maladies.

The cardinal symptoms of abdominal aortitis had been fully described by Potain, epigastric pain, rachialglia, irradiating pains in both flanks, palpitations, &c., these form the subjective symptoms, while the objective consist essentially of three: *pain provoked* over the aorta and the iliac arteries, *deviation of the vessel*, and *mobility*

The pain could be very intense; was localised to the vascular walls, and could be continued along the iliac arteries to the inguinal regions, a fact of great importance. The aorta was frequently deviated, became curved and sinuous, forming an arc, with the concavity turned towards the vertebral column. At the same time the vessel became mobile by reason of the laxity of the cellular tissue.

As symptoms corollary he would mention pulsation in the epigastrium, a *bruit de souffle* perceived by the stethoscope, particular position of the patient in bed (knees drawn up and decubitus on the side), severe contraction of the rectus muscle frequently giving sensation as of a tumour in the epigastrium.

When the three essential symptoms were present—pain on pressure, deviation, and mobility—the case presented no difficulty. However, it sometimes happened that, in spite of careful examination, the diagnosis was not satisfactorily demonstrated; in such cases he had obtained considerable assistance from the sign of the anterior tibial artery. Where hypertension was discovered in that vessel, as contrasted with the degree of compression of the radial artery, it proved absolutely that the sub-diaphragmatic vessels were in a state of irritation and the diagnosis of abdominal aortitis was presented, but when the tibial artery was in a condition of hypotension, then the symptoms complained of by the patient might be fairly attributed to one of the complex affections inherent to neuropathy. For the speaker, the sign of the tibial artery was almost pathognomonic. The treatment would be—rest in bed, gentle diet, poultices or blisters, according to the degree of intensity of the malady. Applications of belladonna ointment, enemas of bromide of ammonium to calm irritation of the intestines. Internal medication was always necessary, and consisted in preparations of iodine and tannin, and, perhaps, small doses of calomel.

ZONA.

Paint the vesicles with salicylate of methyl morning and evening and apply oil silk. Relief and cure rapidly obtained.

MORTALITY IN THE FRENCH ARMY.

French military hygiene is evidently not altogether up to date. According to a recent statement of the Minister of War, the mortality per annum in the army is 2174, as compared with 741 in the German army. This means that since the Franco-German War the French have lost from disease 99 000 men, while the Germans have only lost 13,000 men. No wonder the Minister "deplores" the sanitary conditions which prevail in military life. The principal causes of death are typhoid fever, scarlatina, and tuberculosis.

THE opening meeting of the Dublin University Biological Association was held on Thursday last, when the newly-elected President—Dr. T. P. C. Kirkpatrick — delivered an inaugural address on "Consumption and the Public Health."

Germany.

[From our own Correspondent.]

Berlin, November 29th, 1902.

At the Medical Society, November 5th, Hr. Baginsky discussed the question of

Antistreptococcus Serum in Scarlatina.

He reminded his hearers that in 1892 he had made the observation that when scarlatina occurred as a complication of diphtheria the diphtheria bacillus disappeared from the fauces, and its place was taken by the streptococcus. If this occurrence was not altogether constant it was at least very frequent. He had examined 696 cases of scarlatina bacteriologically, and had always found streptococci, mostly in company with other bacteria, such as staphylococci, diplococci, Loeffler's bacillus, and many others. From the frequency of the occurrence of streptococci in the disease he drew a certain significance of the one for the other, and believed that the streptococci were not to be looked upon as secondary. Nothing more specific could be found in streptococci cultivated from those found in the mouths of scarlet fever cases.

Aronson had prepared an immunising serum from streptococci which the speaker was himself convinced possessed strong immunising properties and did no harm whatever.

Although earlier attempts to treat scarlatina with Marmorek's antistreptococcus serum had failed, he proceeded to take them up again with Aronson's new serum.

In order to obtain information as to the mortality of scarlatina, he had compared the rates for different years and ascertained that they were subject to the most extraordinary fluctuations without its being possible to discover any explanation for this.

The slight difference in the mortality between those treated with serum and those not (11 to 14 per cent.) was of no value in arriving at a conclusion. He first injected 20 cc.m. and repeated this according to requirement until six times the quantity had been given. In January he only treated four bad cases with these high doses, in which not only no improvement was demonstrated, but the speaker was glad that the children overcame the effects of the injections. After an interruption, however, he recommenced his attempts at treatment, and this time the serious and alarming effects did not appear. The character of the epidemic had, however, not apparently altered, but Aronson had succeeded in preparing a stronger serum, and in arranging a more accurate dosage.

Without the fall of temperature having anything characteristic about it, on the third or fourth day after serum treatment in uncomplicated cases, and from the fifth to the sixth in cases not so treated, he then believed the serum had an action. He was in a measure able to dominate the disease, not in so *éclatant* a manner as diphtheria with diphtheria serum, but certainly better than before.

A sudden euphoria, such as Escherich observed after the injection of Moser's serum he had not seen himself. This observation showed, however, that even that serum was active, although prepared in a different way (without previously passing through animals).

Hr. Menzer observed that he had seen articular rheumatism run a more severe course in winter than in summer, and he considered it possible that the absence of severe cases was due to the time of the year.

Hr. Aronson reminded the Society that with increasing concentration of the serum the results had been better. In the case of serum prepared without passing through animals exact dosage was impossible.

Hr. Baginsky, in reply, maintained that the serum had become better instead of the cases showing more favourable symptoms.

The Dutch Treatment of Epilepsy.

(*Neurol. Cuol.*, 17, 1902). Dr. Hubert Schintzer writes in the paper named that the inmates of the Kückenmüller Institution, Stettin, have the following diet: 1½ litres of milk, 20 grm. butter, 3 eggs, 400 grm. bread-fruit, either uncooked or cooked, sodium chloride about 2 grm. The bread, instead of being baked with salt, is made so that the daily allowance of 400 grm. contains 3 grm. of sodium bromide. The following results were obtained In two cases the attacks ceased the whole period of the experiment (forty-two days); in ten cases there was very considerable improvement; and in two no improvement was noted. In most of the cases the severity of the attacks was considerably diminished.

The results are worthy of note, even if they do not equal those of Bálint. The patients do not submit to the diet for long. The writer advises that in treating epileptic cases a period of six to eight weeks should be occasionally put in when the above-named method of treatment should be carried out.

Bromipine.

Dr. Joh. Kejzlar (*Kl. Therap. Wochensch* 39/02) recommends bromipine as a good and useful remedy in condition of nervous excitement, especially with the nervous palpitation of neurasthenics, in whom the administration of a teaspoonful of a 10 per cent. solution of bromipine will induce sleep. It is also useful in hysterical attacks, in nervous sleeplessness and giddiness, as well as in infantile convulsions. The taste was rather disagreeable, but it could be given in hot milk, sweet wine, or in capsules.

Austria.

[From our own Correspondents.]

Vienna, November 29th, 1902.

Lympho-Sarcoma.

At the "Gesellschaft der Aerzte," Sternberg showed the organs and blood preparations taken from a case of lympho-sarcoma in the anterior mediastinum, associated with leucocythæmic enlargement of the spleen and liver. In the brain at the post-mortem were found numerous blood clots about the size of beans, while the marrow of the long bones was of a dark red.

The patient, fourteen years of age, was a bookbinder's apprentice, and on account of an increase of the size of his abdomen and difficulty of breathing was received into hospital. On admission the spleen was found to be considerably enlarged, with great tenderness, or rather pain, over the long bones and sternum.

The temperature ranged about 38° Centigrade (100 4 Fahr.) The leucocytosis of the blood was very pronounced, being as one to two, more particularly in respect of the mononuclear cells or lymphocytes.

Hitherto we have been in the habit of diagnosing this condition of the blood as leucocythæmia, but from the light shed on the subject recently by Drozdu, this view must be accepted with caution.

Drozdu's case bears a close resemblance to the above, and was carefully observed for eight days. There was a lympo-sarcoma, and the blood was typical of leucocythæmia.

These cases are particularly interesting from the pathological combination of lympho-sarcoma with leucocythæmic changes in the liver and spleen.

Kretz related a similar case, that of a patient whom Paltauf had exhibited at the Dermatological Congress in 1892. The patient was suffering from lymphodermia, with all the hæmatic conditions of lymphatic leucocythæmia.

Foreign Body in Larynx.

Chiari next showed a triangular piece of charcoal, measuring two and a-half centimetres in length, two in breadth, and one in thickness, which he had taken from the throat of a child, æt. 5. The child had been eating spinach on September 23rd, when suddenly something stuck fast in the throat, setting up a violent cough that caused blood to flow profusely. As there was considerable pain and difficulty in breathing it was resolved to perform tracheotomy. On trying to introduce the tube into the upper part of the trachea no passage could be effected, so the patient was again narcotised and examined with the laryngoscope, but without success. At last the Röntgen rays were requisitioned, and the obstructing body seized with a long pair of forceps and extracted through the wound.

Grossman related a similar case where the foreign body swallowed was a piece of bone, which caused great pain and dyspnœa, but was finally coughed up, to the great relief of the patient.

Deceptive Impressions.

Urbantschitsch next delivered a lecture of a rather metaphysical character on the relationship of sight, sound, and touch sensation. He showed that moving bright lines or a number of points would produce a peculiar sensation; a monotonous tone will produce a particular image, and irritation of any organ of touch gave rise to the perception of certain sounds. Coloured surfaces will also act on the acoustic apparatus and produce the sensation of particular sounds.

Splenic Eversion.

Later Budinger showed female, æt. 37, on whom he had performed splenectomy for twisting at the pedicle. This accident took place quite suddenly, without any severe straining to account for its production. The spleen had revolved 180°, so that the internal margin had become external. The spleen was replaced and secured, and the patient made an excellent recovery.

Zuckerkandl referred to the etiology of these floating spleens, and remarked that the wonder was we had so few of those malformations considering the history of the organ. In a normal condition the pancreas and the spleen are evolved from the fœtal mesogastrium, and about the fourth month of fœtation it appears in the posterior region of the abdomen, where the spleen and pancreas arrange and fix themselves. For a time after this the growth of the organ is suspended while left hanging to the mesentery, when the slightest movement might cause displacement.

Ullmann related a similar case of splenic torsion, for which he had performed splenectomy two years ago. In his case no such conditions as Zuckerkandl had related were the cause, as the patient had suffered from malaria and had a very large spleen in consequence. After contraction, the spleen was found to wander away to the right side, and subsequently become twisted, rendering an operation necessary owing to the tenderness and extreme pain in the right hypochondrium. Three weeks after the operation the patient left the hospital perfectly well. Several weeks after her discharge she died from the effects of sepsis after criminal abortion, when the post-mortem showed that the operation had been perfectly successful.

Latzko demonstrated a case that supported the inhibition of growth referred to by Zuckerkandl. The spleen had been retained in the pelvis along with the pancreas. Along with the spleen was found a hæmorrhagic cyst about the size of a child's head.

◆

The Operating Theatres.

GUY'S HOSPITAL.

Operation for Deformity Consequent on Separation of the Lower Epiphysis of the Radius in a Child, a Condition commonly Regarded as Constituting one of the Varieties of Colles's Fracture.—Mr. Arbuthnot Lane operated on a child, æt. 8; the fracture had taken place three weeks before admission, and had been treated in the usual manner, namely, by some form of manipulation and by a mechanical arrangement which, Mr. Lane said, goes by the name of Carr's splint. The resulting deformity and disability were great, especially the deformity, which was most distressing to the parents of the child. The fracture was freely exposed from the outer side, when a sharp, thin chisel was introduced through the junction of the displaced epiphysis and shaft, and the junction was cut through; the lower end of the shaft was then thoroughly freed from the surrounding soft structures, and with much difficulty brought into its normal relationship to the epiphysis; being retained in position by means of a rod of thick silver wire.

Mr. Lane pointed out very strongly the utter folly of treating these cases of separated epiphyses of the lower end of the radius by manipulation and splints, unless perfect adaptation of the fragments can be effected. This applies also, he said, to the treatment of Colles's fracture in active adult life; in old age the comminution of the lower fragment is so considerable that an operation is more rarely required and offers fewer advantages. In separation of epiphyses, he remarked, callus is thrown out in abundance at a very early date, and if an operation is required the earlier in the history of the case it is performed the better. After two or three weeks have elapsed the difficulties that have to be met, and the demands on the skill of the operator, are very great. He had recently called attention to these points in a paper in the *Practitioner*, in which he had shown that if the displacement is not rectified, the whole length of the shaft alters in character, an entirely new one replacing that which previously existed. This most interesting experiment shows, he said, that the skeleton is the crystallisation of the lines of force, those running in varying directions being laid down as cancellous tissue, and those in one direction as compact tissue; also that any alteration in the normal mechanical relationship of the organism to its surroundings is followed by corresponding alterations in the anatomy of the skeleton, these changes taking place in a degree inversely proportional to the age of the subject, this being particularly the case in infancy.

The subsequent progress of the case was most satisfactory, only a slight difference being observed at the end of a month between the two hands.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

EXTREME CASE OF CONGENITAL TALIPES. — Mr. ARBUTHNOT LANE operated on a child, æt. 8; the case presented very considerable deformity, the sole of the foot being turned inwards and a bursa having formed upon the outer surface of the cuboid and fifth metatarsal. There was present a scar in the hole of the foot extending from the internal malleolus to the base of the fifth metatarsal bone, along which line all the soft parts had been divided down to the bones. There was no evidence to show why this operation had afforded no advantages to the child. Mr. Lane came to the conclusion that the only way in which the sole of the foot could be made to perform its normal functions was by the excision of the cuboid; this was accordingly done; the base of the fifth metatarsal was wired to the outer surface of the os calcis. The foot was retained securely in position by means of a plaster of Paris arrangement. The result of this operation, in so far as the form of the foot was concerned, was very remarkable; it certainly, Mr. Lane said, had none of the extreme mechanical disadvantages which follow division of all the soft parts of the sole of the foot by an open incision. Mr. Lane urged most strongly that all cases of talipes requiring operation, or likely to require operation, should be suitably operated on the day after the child is born. He considered the present plan of postponing operative interference for two or three months as unscientific and ridiculous in the extreme.

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"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 3, 1902.

THE GENERAL MEDICAL COUNCIL.

THE session which has just come to an end has been conspicuous by the absence of any particularly "burning" topic for discussion, The Midwives' Bill, having become law, ceased to possess any interest for the Council, and no opportunity was afforded for resuming the debate on the attitude of the Royal Colleges towards the Council's remonstrances. The list of penal cases was heavy, but none of them possessed any particular interest. One practitioner hailing from Birmingham was found guilty of discreditable advertising, and with a leniency which is not altogether easy to understand, the Council allowed him six months in which to reflect upon his conduct with a view to reform. The revised scheme for the prevention of personation on the part of persons applying for registration in the *Students'* and *Medical Registers* has been brought to a satisfactory conclusion, and the thanks of the profession are due to Sir Victor Horsley for having carried through this important reform. It would be too sanguine to suppose that the offence of personation has thereby been rendered impossible, but at least it has been made much more difficult and less liable to escape detection. The most important subject before the Council was the draft of a bill to amend the existing Medical Acts in order to enable the Council to carry out the financial reforms recommended by the Financial Relations Committee, the principle of which was approved by the Council in May last. The Bill proposes to give the General Council greater powers in respect of the Branch Councils, and to throw the funds hitherto allocated to the latter into the general fund. As Dr. McVail humorously pointed out, this will not of itself remedy the penury with which the Council is threatened, especially as in the case of the Irish Branch Council there are no funds to transfer:

> "For optics sharp it needs, I ween,
> To see what is not to be seen."

The next step, therefore, is to provide the sinews of war, and the means to be adopted will take the form of an increase in the fee paid on registration from five pounds to a sum not exceeding ten pounds. It may be taken for granted that the Council would not avail itself of this latitude, when accorded by Parliament, to impose the maximum sum forthwith; indeed, seven pounds was suggested as a suitable beginning. This device will leave the Council in possession of a margin which can be impinged upon should the duration of the sessions undergo further indefinite extension with a corresponding increase in the expenses attendant thereon. As there exists a doubt as to the power of the Council to insist upon the registration of students, a clause is introduced to make it compulsory, thus providing the desired opportunity of mulcting the aspirant student to the sum of one pound. No objection can be taken to this moderate impost, which has the merit of tapping a new source of revenue, and conjures the bogey of an annual contribution to the funds levied on practitioners already on the *Register*. No mention is made in the draft Bill of any provision to establish the right of the Council to decide and regulate the vexed question of the scientific education of medical students, and no doubt this omission is based on the hope that the Royal Colleges may come to terms.

REFORMS IN LUNACY LAW.

The study of insanity is one of practical importance to every practitioner of medicine of whatever rank or standing throughout the Empire. Happily it has advanced steadily in the path of humanity, as well as of enlightenment, in common with other branches of applied medical science. The problem of how to deal with persons of unsound mind is obviously beset with many difficulties, not the least of which arise from the social disability that unfortunately attaches itself in the mind of the public to the mention of the words "insane" and "lunatic asylum." The history of the treatment of the insane in this country has shown clearly that there are two widely differing sides to the question, namely, the scientific and, what may be called for want of a better term, the social or legal, or medico-legal. There can be little doubt in reference to the latter section that the experience of the purely scientific worker, valuable as it is from many points of view, is only of indirect value in modifying the wider issues involved in the interference with the liberty of the subject by compulsory detention of certified persons within the walls of a public or a private asylum. The constant care of the Legislature has been to safeguard the liberties of the subject by such machinery as certificates, registration of persons receiving insane patients, and periodical official inspection. Some aspects of the wider question have been recently dealt with by Sir William Gowers in the address delivered before the Medico-Psychological Society of Great Britain and Ireland. His main thesis appeared to rest upon the advocacy of a more elastic system, whereby persons of unsound mind might be received into the houses of persons paid for their care and maintenance, but without the brand of certification. He also advocated the extension of control over many doubtful or "borderland" cases. This additional power he would place in the hands of medical men by a system of notification which would not necessarily involve detention. The suggestion is worthy of the most careful attention, even, as suggested, at the hands of a Royal Commission. At the same time the fact cannot be lost sight of that without the imposition of stringent safeguards the substitution of notification and the opening of the doors of unlicensed private lunatic asylums would be to resuscitate some of the potential conditions on which were founded the grave abuses that undoubtedly existed in private asylums at no very remote period of time. The proposal for a scheme of compulsory notification of unsoundness of mind offers many attractive features. In our opinion, however, to be effectual it would have to be combined with a public lunatic asylum service fitted for all ranks of the community. On the private asylum hinges almost all the potential possibilities of evil in the treatment of the insane, and it is to the abolition of private asylums that we look hopefully for the first fundamental step in the reform of lunacy law. The interests concerned in that particular class of institution throughout the Kingdom amount to a vast aggregate, but that consideration is hardly likely to have influenced the views of a man of such known independence of character and clearness of thought as Sir William Gowers. It is interesting to speculate how so important a question as the nationalisation, so to speak, of our asylums for the insane could have escaped mention in his recent valuable contribution. Meanwhile, the attention of the medical profession, as well as of the public, has been further drawn to the matter by experts who have stated their individual views freely enough in the correspondence columns of the *Times* and other journals. Reform of lunacy law is one of the many social matters that has long been in need of drastic and enlightened revision.

MR. JUSTICE BIGHAM AND THE N.S.P.C.C.

The price of popular safety, to paraphrase a famous saying, is eternal vigilance. The administration of justice in this country is happily of the purest, but for all that it is impossible to deny that existing blemishes demand the skilful and timely application of the legislative pruning knife. A court of criminal appeal, for instance, and a readjustment and greater consistency of penalties are reforms that loom large in the near foreground. It remains to be seen what is to be done with judges who lose their tempers or who substitute forensic advocacy for the judicial function. We should be extremely sorry to attribute even remotely any such lapses from official dignity to so distinguished and justly respected a judge as Mr. Justice Bigham. At the same time we venture to think that he has somewhat exceeded the bounds of prudence in his attitude at a recent trial with regard to the National Society for the Prevention of Cruelty to Children. Whatever may be the faults of that body, it is nevertheless beyond question that they have effected an enormous amount of good. On the principle that so many laws argue so many sins, we may infer from the existence of the Society that a great social evil exists in the shape of cruelty to children. The organisation has, indeed, been created in order to protect a peculiarly helpless section of the community. If the tree is to be judged by its fruit, then the Society has justified its existence a thousand times over. In the notorious Penruddocke case for instance, a revolting case of systematic cruelty of a child by parents of good social position would not have been brought to light had no such body existed as the N.S.P.C.C. It is with no little surprise, therefore, that we listen to Mr. Justice Bigham in a recent trial of a baker and his wife for the manslaughter of a child thirteen months old, who died of pneumonia, accelerated, if not actually caused by, starvation. The parents were miserably poor, and the father was admittedly a respectable working man. They were not defended by counsel, so that their case was very properly protected by the Judge. At the same time it is impossible to admit the implied censure of Mr. Justice Bigham on the practice of the working together of the officers of the Society and the coroner. Nor can we understand his ground in preventing a medical witness from stating the average weight of a child of thirteen months as against the actual seven pounds which was the weight of deceased. Such evidence has a distinct corroboratory value, especially when taken with the emphatic medical opinion that the accompanying emaciation was due to starvation. Mr. Justice Bigham may have been perfectly right in pointing out to the jury that it was necessary to sift the evidence of people appearing to support a prosecution to see that there was no exaggeration. The temper of the British public, however, may probably be trusted to exercise proper control over the actions of a vigilance society, which is supported by public charity for high and definite aims.

Notes on Current Topics.

The Function of the Flagella in Malarial Parasites.

As long ago as 1898 MacCallum published certain observations on malarial infection in birds, to show that the function of the flagella of the parasites was sexual. He noticed flagella breaking off from non-granular bodies, and then passing to and penetrating granular extra-corpuscular bodies. The latter, apparently being thereby fertilised, assumed the fusiform shape which is familiar under the microscope. He prophesied that probably the same series of events would be observed in human malarial blood, and a little later he was himself lucky enough to see it taking place. Although no one has ever cast doubt on MacCallum's accuracy, yet only once have other observers—Drs. Warfield and Paussent, of John Hopkins Hospital—verified his account by independent observations. In a recent number, however, of the *John Hopkins Hospital Bulletin* (October, 1902), Dr. Moore, of Texas, describes the same occurrence, which he saw while examining blood from a case of æstivo-autumnal fever. Happening to have a granular and a non-granular body within the field of the microscope at the same time, he noticed the pigment of the latter in very active motion, and in a moment four flagella were shot out One of these freed itself and plunged about until it came into contact with the granular body. After several efforts the flagellum entered the body. About the same time another flagellum became free, and also approached the granular body. For five minutes it seemed to be making unsuccessful attempts to make an entrance, but finally wriggled away. The other flagella also became detached, and were lost sight of among the red corpuscles. The granular body underwent certain changes in its shape and the arrangement of its pigment, but it was not possible to watch it long enough to observe the stages of its development. Nevertheless, we think that Dr. Moore's observation, taken along with the others quoted, is sufficient to establish the sexual character of the flagella of malarial parasites.

The Manufacture of Drugs.

In the matter of physic the modern man of medicine is provided with weapons of infinitely greater precision than those in the power of his ancestors, near or remote. The general improvement has been in great part due to the competition of trade, whereby rival manufacturers have been obliged to study the methods necessary to keep their products in the front rank. In no other way can the business of great wholesale drug manufacturers be established and maintained. Some of them have so far realised the value of standardisation that they themselves have in certain cases voluntarily fixed their own guaranteed standard of strength. The gain all round from this state of affairs cannot readily be estimated. For one thing, medical men are enabled to treat disease with trustworthy remedies, and may rely on their patients being supplied with what has been actually ordered. In the old days, when drugs were prepared by the dispensing chemist, it was impossible for him to keep a supply of all ordinary preparations, so in order to dispense a prescription he had often laboriously to commence by making some extract or tincture or decoction or other vehicle of pharmacology. Nowadays, however, all that is changed, and the smallest country chemist can maintain an ample array of first-rate drugs at a comparatively small outlay. The chief drawback to this Elysian horn of plenty is that the public are tempted to prescribe their own physic. After all is said and done, however, the man in the street, in nine cases out of ten, patronises the well-advertised patent medicines to the exclusion of orthodox drugs of the pharmacopœia.

The Modern Medical Thesaurus.

The vast accumulation of knowledge that has gathered, and is still fast gathering, around the fabric of modern medicine may well give pause to the mind of any mere mortal. It has long passed the limits of comprehension of any man, and the flowing tide of fresh discovery shows no sign of abating. The necessity for specialisation that has arisen from this state of affairs is manifest in every branch of the profession. Nowadays, even the general practitioner is wont to specialise in some particular direction, a proceeding that cannot fail to react favourably upon his practical attainments. Indeed, the really well-equipped specialist never loses touch with the wider aspects of his profession. In some distant future it seems not unlikely that a vast number of human maladies will vanish before the aggressive march of preventive medicine. It is most interesting to speculate on the enormous number of ailments that will be banished when science obtains the mastery over say, half a dozen communicable diseases, such as whooping-cough, enteric fever, influenza, measles, and summer diarrhœa. Happily, too, for the future man of medicine there is the certainty that every now and then some general law will be deduced from the vast mass of observations, whereby his labours will be lightened. Meanwhile the much-abused medical publisher does his best to make the path clear by the provision of a host o- systematic treatises on both general and special subjects.

The Sacredness of "Natural Methods."

Many minds bow in humility and adoration before what they are pleased to term "the Light of Nature," and accord to so-called "Natural Methods" such reverence and obedience as they willingly grant to "divine law." "Instinct" is trusted while instruction is decried. And in much confusion of thought advocates for natural methods not infrequently counsel a return to procedures worthy only of the savage and the beast. We are glad to find that Mr. H. G. Wells, in the November number of *The Cosmopolitan*, boldly attacks such a superstitious and sentimental attitude.which in certain quarters is forming a serious opposition to the beneficent application of scientific measures. It has long been a prevailing idea that with maternity came the necessary instincts for the protection and preservation of the new life. And still, in spite of all the ghastly evidence of the folly of such a contention, the old tradition exerts its fatal spell. The holocaust of children still goes on, and the massacre of the innocents is perennial. While political agitators scream hysterically regarding a totally unforeseen and unavoidable epidemic of measles which unfortunately proved fatal to some thousands of children in South Africa, they remain dumb when in that very same year more than twenty-one thousand little children die needlessly in Lancashire. Probably three-fourths of the children born in England start life handicapped, and fail to reach their highest development. They are born of mothers preoccupied by the necessities of earning a living, or by vain occupation, or already battered and exhausted by immoderate child-bearing; they are born into insanitary and ugly or inconvenient homes; their mothers or nurses are ignorant or incapable ; there is insufficient food or incompetent advice ; and with vitiated air and lack of sunshine they remain throughout life physically submerged. The light of modern medical science is used to dispel the dark shadows cast by the "Light of Nature."

Folk-Medicine in Ireland.

There are few more entertaining, though perhaps many more useful, studies for a medical man than that of the origin of his craft, and in particular of such remains of primitive medical lore as still linger in the form of popular remedies and treatment among the more ignorant and conservative of the people. And indeed, worthless as are most of the facts we come across, when considered in relation to modern medicine, yet we sometimes find that popular opinion has by many years anticipated science in the adoption of some useful therapeutic measure. For instance, the treatment of rheumatism by a decoction of willow bark was in use as a folk-cure in Ireland long before its active principle, salicylic acid, was used by the faculty for the same purpose. But folk-medicine is by no means dainty in its choice of medicaments, and we find that human and animal excrements have always held a large place in its pharmacopœia. Thus, as we learn from Colonel Wood-Martin's recent book, "Traces of the Elder Faiths in Ireland," cow-dung is in common use as a dressing for cuts and wounds in the west of Ireland, while human urine is used as a lotion in the same kind of injuries. A continued poultice of cow-dung has also the reputation of preventing pitting and scarring in small-pox. *Euthanasia* in hydrophobia has long been in use, and we have heard of a patient suffering from this disease being smothered with a feather-bed little more than ten years ago. Saliva has many therapeutic applications, and sore eyes are constantly treated by being licked by a person with "the gift." The cure in such a case was never effected without the recitation of the appropriate charm.

Exploratory Tapping in Suspected Abscess of the Liver.

In an interesting paper read before the last meeting of the Clinical Society Lieut.-Colonel Hatch uttered a well-deserved caution against the practice of making exploratory punctures in cases of suspected abscess of the liver. Very serious consequences not unfrequently follow this operation, especially in cases where the diagnosis of abscess ultimately turns out to be unfounded. The needle sometimes passes through the pleura, thus exposing the patient to the risk of empyema, or it may set up uncontrollable hæmorrhage in the congested liver substance. The suggestion made by experienced surgeons that it is better to make a small incision through the abdominal wall in order to see where the needle is introduced has much to recommend it. The caution is addressed to physicians rather than surgeons, because it is they who habitually resort to the needle in their endeavours to support a doubtful diagnosis. The proper application of this means of exploration is rather to localise exactly the position of an abscess the existence of which has already been established than merely to make sure of its existence.

The Penruddocke Case.

The recent notorious Penruddocke case, in which the wife of a county magistrate of good social position was convicted of gross cruelty to a child, presents various points of interest. The origin of the mother's harsh treatment of her daughter is to be found in the incontinence of urine from which the latter suffered. In the eye of the law, no less than of ordinary ethics, the mother was utterly unjustified by that fact in inflicting a long series of brutal punishments upon the child. Her first prompting probably arose from the mistaken view that the physical affliction was due rather to wilful carelessness and neglect on the part of the little one than to the functional or organic imperfection that really lay at the root of the matter. Hence she was perfectly logical, from her mistaken point of view, in adopting punishment as a means of correcting a condition that required patient and prolonged medical treatment. With other aspects of this remarkable case we are not so directly concerned. However, it may be well to note that but for the existence of the National Society for the Prevention of Cruelty to Children this prosecution would not have been forthcoming. That the mother should have been allowed to escape with a fine of £50 suggests that the penalties daily inflicted upon poor persons are disproportionately severe. *Mutatis mutandis*; any working man convicted of gross cruelty to a child should henceforth be permitted to commute his imprisonment by payment, say, of five shillings, which would be no more to him than fifty pounds to Mrs. Penruddocke. That the husband of the latter should be allowed to remain on the magistrates' bench seems hardly reassuring as to the future dispensing of justicial justice.

The Case of Mr. J. W. Ayres.

The decision of the General Medical Council in allowing the name of Mr. J. W. Ayres, of Liverpool, to remain upon the *Medical Register*, in spite of his having been sentenced to a term of imprisonment for manslaughter, will, we feel sure, meet with the approval of those who remember the peculiar circumstances of the case. In a scuffle, following upon the ejection of a drunken man from his surgery on his refusal to leave, the man sustained a fracture of the skull. This was not suspected at the time, and he was left in his clothes and untended for six days at his home before being removed to the hospital. Moreover, at the autopsy he was found to have been suffering from extensive renal and cardiac disease. Mr. Ayres might well plead that the catastrophe was of the nature of a misadventure, and although the jury declined to endorse that view, it evidently commended itself to the Council.

International Amenities and the Mount Vernon Hospital.

While politics engender jealousy and commerce breeds rivalry between the nations of the earth, science has done much to lessen racial prejudices, and the beneficial influence of co-operation is nowhere more marked than in matters concerning the health of humanity. As evidence of the good feeling existing between British physicians and German scientists, we welcome the recent graceful act of Professor Koch, the "discoverer of the tubercle bacillus," who has presented to the library of the Central Out-patients' Department of the Mount Vernon Hospital an excellent portrait of himself. This is a pleasing testimony to the excellent work of one of our most progressive British institutions. We are pleased to find that the King's Hospital Fund has made a grant of £1,000 to support fifteen beds in the hospital at Hampstead in addition to a donation of £500. We learn also that the erection of the country branch at Northwood, which will accommodate at least an additional 100 patients, is advancing rapidly. New offices and a commodious and fully-equipped out-patients' department is being prepared in Fitzroy Square, and considerable extensions at the hospital are now in progress. The Mount Vernon Hospital is rapidly taking its place among our leading national establishments for the treatment of consumption, and very shortly at least 240 beds will be available. It is well to remember that the recent extension of the hospital has been rendered possible by the munificence of a benefactor, who, however, still desires to remain anonymous.

Taxis in Strangulated Hernia.

Many surgeons are strongly averse to the employment of taxis for the purpose of endeavouring to bring about reduction of a strangulated hernia, on the ground that it is often fraught with very disastrous consequences. Obviously the employment of too prolonged or too violent force is attended with considerable risk of bringing about reduction *en masse*, but that this rarely follows resort thereto in skilled hands is proved by reference to hospital reports, which prove that this complication is of the rarest possible occurrence in hospital, where, of course, taxis is applied only by those who realise what degree of force is admissible. To do away altogether with taxis in these cases would unquestionably add greatly to the already grave risks associated with this condition. Only the failure of moderate taxis can determine the absolute necessity for operation, and the mortality following operation is far too high for it to be the intervention of selection. It simply amounts to this, that taxis applied to hernia, strangulated or otherwise, is a procedure calling for the exercise of gentleness and prudence, bearing in mind that in cases where no omentum is present in the sac to act as a buffer, a comparatively slight amount of manipulation may gravely injure the delicate bowel.

The Pathology of Gonorrhœal Rheumatism.

The occasional association of arthritis with an attack of gonorrhœa has given rise to much inconclusive discussion as to the exact relationship of the two. Inasmuch as this complication occurs especially in individuals of rheumatic antecedents, it has been asserted to be merely of the nature of a coincidence. That this should be the case appears in the highest degree improbable. Its occurrence is too frequent to be merely a coincidence, and no valid reason is advanced why the arthritic tendency, if of the ordinary type, should localise itself, as is generally done in this connection, in only one large joint, usually the knee. Moreover, the other symptoms associated with articular rheumatism are wanting. Recent bacteriological researches conclusively prove the direct dependence of the joint affection on the urethral infection. In an instructive case reported by Dr. Vaquez, two sisters, who contracted gonorrhœa from the same individual, both developed monoarthritis, and, although the synovial fluid apparently did not contain gonococci, numerous colonies of the organism were discovered in the synovial granulations, proving the specific nature of the lesion. The fact that both sisters were similarly affected supports the view that the soil is not without importance in determining the liability to arthritis as a complication of gonorrhœa. In another case the husband and wife while suffering from gonorrhœa both developed arthritis, a fact which may be interpreted in favour of the view that the specific virulence of the gonococcus has more to do with the production of arthritic complication than the soil, since in all these cases the same organism determined the arthritic lesions in different subjects. The important point, however, is the specific nature of the arthritis which may be regarded as established.

Cosmetic Injections of Paraffin.

The injection of paraffin for the purpose of remedying facial and other deformities bids fair to become a recognised and popular procedure. Much experience has already been accumulated in favour of its efficacy and innocuousness, although there has not been complete immunity from undesirable, and even disastrous, results. Exceptionally, the injection has given rise to violent local reaction, followed by sloughing of the integument, but this untoward result may be attributed to the injection of too large a quantity of paraffin, especially when the skin is adherent or adjacent to bone. In one case some of the paraffin seems to have entered the circulation, causing unilateral amaurosis, due presumably to its setting up embolism of the ophthalmic vein. This mishap, which would constitute a serious drawback were it of frequent occurrence, may be avoided by making the injection just when the paraffin is on the point of solidification, thus obviating the risk of its entrance into a wounded vein. Caution is advisable when the skin over the area to be injected is tense, adherent, or unprovided with a fair amount of subcutaneous tissue. What happens to the paraffin in the long run is a point as yet undecided, and it is not perhaps one of immediate importance. By the judicious use of paraffin injections we have at our disposal a means of remedying disfigurements which are the source of considerable distress to the victims, and in certain cases it is also of service in restoring the mechanical function of parts after loss of tissue.

Why do Digestive Organs not Digest Themselves?

Physiologists have laboured long, and not with conspicuous success, to explain how it is that digestive juices do not act on the glandular tissues by which they are secreted. Numerous hypotheses have been advanced, but none of them can be regarded as altogether satisfactory. A possible explanation may be that they do digest the secretion-producing cells. We know that the wear and tear of secretory cells is proportionate to the activity of the gland, and the persistence of the gland as a whole may be due simply to the automatic evolution of fresh cells to take the place of those which have perished by reason of their contact with the digestive secretion. The suggestion that such secretions are only poured forth when there is food to be acted upon, and that in the absence of the latter the glands are inactive, is not based on scientific data, since the food does not enter the ramifications of the glands and cannot protect the duct walls against their action. In the case of the stomach, the alkaline reaction of the tissues may conceivably prevent the action of the gastric juice on the walls, but this argument does not apply to the pancreas, the ferments whereof do not require an acid medium to produce their characteristic effects. The problem is complicated by the fact that in certain morbid conditions the gastric juice does act on the epithelial lining of the stomach walls, but this may be due to some local defect of resistance, such as would be entailed by interference with the blood supply to the part. No explanation other than the assumption of an essential power of resistance, which is the property of living tissues, adequately explains their immunity, and we have an analogous phenomenon in the fact that living tissues in some way inhibit the coagulation of blood, or at any rate induce it much less readily than do dead ones.

The Opening of the New Medical Institute in Belfast.

The principal medical event of the past week, so far as Ireland is concerned, was the formal handing over to the Ulster Medical Society of the Medical Institute which has been so generously presented by Sir William Whitla to the medical profession in Ulster. His Excellency the Lord Lieutenant, who was a visitor to Belfast during the past week, graciously consented to attend the opening ceremony, and to perform the pleasant duty of declaring the Institute open. His Excellency, in the course of his speech, bore testimony to the generous and self-depreciatory spirit in which Sir William Whitla had made his gift. "It is not everybody who realises that merely giving people something, unless it is done in a tactful way, does not always meet with the thanks that the giver expects. Now, I know that Sir William Whitla, in presenting you with this building, has done so in the most tactful and the most unadvertising manner possible." We are sure that his Excellency's words were echoed by the members of the medical profession present. We congratulate the Ulster Medical Society on the receipt of so valuable a gift, and re-echo his Excellency's hope "that its roll may contain for many years the names of many distinguished Irish doctors." We are pleased to be able to present to our readers a full report, which was specially obtained for our columns, of the opening ceremony, and also to reproduce an illustration of the Smyth memorial window. We are the more pleased to publish this, inasmuch as in certain quarters there appears to be a desire to decry the importance of the new Institute, and the proceedings of the past week in general.

THE death is announced from appendicitis of Dr. Walter Reed, of the United States Army Medical Service, to whose investigations into the etiology of yellow fever while stationed at Havana we owe much useful information concerning the transmission and the means of checking the spread of the disease.

DR. MALONE LEE, A.B., M.B., B.Ch., B.A.O., R.U.I., has been elected senior house physician at the Mater Misericordiæ Hospital, Dublin.

A PORTRAIT of Dr. Professor Robert Koch has been placed in the library of the Mount Vernon Hospital for Consumption, having been "presented by request" of the eminent professor.

SIR MICHAEL FOSTER, M.P. for the University of London, announces his intention of resigning at the close of the present session. Sir John Williams and Sir Henry Roscoe are mentioned as probable candidates for the representation of the University.

Correspondence.

[We do not hold ourselves responsible for the opinions of our correspondents.]

"FANATICS AND THE PUBLIC HEALTH."

To the Editor of THE MEDICAL PRESS AND CIRCULAR

SIR,—As a member of the International Congress for the Prophylaxy of Venereal Diseases, recently held in Brussels, will you kindly allow me to point out that there is not the slightest ground for supposing that the regulation system abroad, or the Contagious Diseases Acts (Women) in this country, have either, or both of them ever had any beneficial influence upon the incidence of venereal diseases either in this country or elsewhere. Indeed it goes without saying that a sanitary law applicable to one sex only must necessarily fail to attain the end in view, for men (soldiers, sailors, explorers, the mercantile marine, and others) are undoubtedly the most active propagators of syphilis all over the world, and so long as they are untouched and free to spread disease it is idle to expect any so-called stamping-out by dealing with women only. Besides, clandestine prostitution, the natural and inevitable outcome of the system, always has wrecked and always will wreck any attempt to deal with disease in this fashion, for it is well known that do what you may, only one in ten, or one in twenty of the women who are now and then sources of infection can be got on to the register of infamy at all, while those who escape registration, for fear of their natural enemies the police (who, it is well known commit the most shameful outrages), conceal their diseases, and are consequently never properly treated and become more dangerous than ever. Even those on the register cannot be forced to attend regularly or often enough. The menstrual period precludes examination in a vast number of cases. We cannot distinguish gonorrhœa from leucorrhœa (which latter is so common among all classes of women that high authorities have declared it to be a normal condition). We cannot detect a discharge if it has been washed away, and we cannot say whether such discharge, even if detected, would communicate gonorrhœa or syphilis (if the patient has previously had syphilis, though no signs of it are present), or whether, as is so often the case, it would prove to be quite innocuous. Everyone of experience knows that it is only very rarely and with great difficulty that we can detect the initial lesion of true syphilis in the female, a detection not likely to be made in the perfunctory examinations of women by the score or hundred, and unquestionably there is great risk of spreading disease to healthy women by unclean instruments. Clearly such a system, by the false security which it gives, can only aggravate every evil, both physical and moral. It has done so and always will do so. The resolution proposed by Dr. Landouzy, the well-known and distinguished physician of Paris (at the Brussels Congress), declared, "That the regulation system as it exists has proved ineffectual and ought to be abandoned." He was backed by Professor Gailleton, Professor Gaucher, Dr. Queyrat, Dr. Fiaux, Dr. Sicard de Plauzolles (France). Dr. Santoliquido (Italy), Dr. Blaschko (Germany), Dr. Ernest Lane (England), Dr. Morgenstierne, Dr. Boeck (Norway), Dr. Rethaari Macaré (Holland), and numerous others. Ricordi used to say, "That if a man wishes to escape syphilis he must avoid the risk of catching it ; there is no other way."

I am, Sir, yours truly,

M. D.

Literature.

HAMER ON PUBLIC HYGIENE. (a)

THIS handsomely got-up and well-written volume deals in a masterly manner with the varied problems of the very important science whose theory and practice it undertakes to teach. The contents are divided into twelve chapters, of which the first is "Introductory," and deals with "The Rise and Progress of Preventive Medicine," and a most interesting and instructive document it is; the second deals with the all-important subject of "Air"; the third with that of "Water"; the fourth with that of "Soil"; the fifth with the engrossing subject of "Food"; the sixth bears the title, "The Collection, Removal, and Disposal of Refuse"; the seventh, "Dwellings, Schools, and Hospitals"; the eighth, "Parasites—Infection—Immunity"; the ninth, "Infectious Diseases"; the tenth, "Disinfection"; the eleventh, "Vital Statistics"; and the twelfth, "Sanitary Administration and Sanitary Law."

This text-book has been—professedly—prepared with special consideration for "the needs of those who are seeking a Public Health Diploma." We can congratulate the author on the effectiveness with which he has carried out his self-imposed task. So far as we know there is no better guide-book at present existing in the English language for the student who is about to investigate the mysteries of the dark places of the engrossingly important subject of preventive medicine. From "the first great landmark of epidemiology," which is to be found in the "Epidemics of Hippocrates," to the most recent illuminations of bacteriological pathology, the author has omitted no record or discovery of any special importance for the interest or instruction of the student whom he has undertaken to teach. "The troglodyte flint-chipper may have suffered from what is known as 'silicosis,'" and the legislation of the closing years of the nineteenth century has taken precautions "for securing the cleanliness of milk stores, milk shops, and milk vessels; for prescribing precautions to be taken for protecting milk against infection or contamination." Every intermediate stage in the long succession of centuries which has contributed anything worthy of survival to the formulation of the laws necessary to the preservation of the general health of the human race, has received a due proportion of attention, within the writer's prescribed limits. The subjects of malaria and tuberculosis may safely be taken as tests of the trustworthiness of the up-to-date information supplied by this manual; and we can unhesitatingly say that we cannot find a flaw in its teaching. After this announcement we need only close this notice by recommending the volume to all students of hygiene, and wishing its future all the success which it thoroughly deserves.

(a) "Manual of Hygiene." By W. H. Hamer, M.A., M.D., D.P.H.Cantab., B.Sc.Lond., F.R.C.P., Lecturer on Public Health, St. Bartholomew's Hospital. With 93 Illustrations. 8vo. Pp. xii and 622. Price 12s. 6d. net. London: J. and A. Churchill. 1902.

SAVILL ON NEURASTHENIA. (*a*)

During the last quarter of a century much has been done in the generalisation of knowledge of the obscure depreciation of the nervous system which is known as neurasthenia. This morbid state, so protean in its manifestations and so vague in its clinical delimitations, has so far gained in public esteem that we are confronted with the danger of its being made, like muscular rheumatism and influenza, a cloak for ignorance or diagnostic incapacity.

The subject is one which has a copious literature, and it cannot truthfully be affirmed that many additions to the list of contributions thereon add in any tangible degree to our knowledge of the subject. For the present, however, it is of much greater importance to impart what may be called a working knowledge of the subject to practitioners than to seek to trace its more recondite manifestations and phenomena. This is especially the case in view of the very satisfactory results afforded by treatment thoroughly carried out on scientific lines.

In these lectures the very important subject of etiology is carefully discussed at considerable length. That is well, because success in treatment depends very largely on a proper comprehension of the factors in the individual case. If we do not remove the cause, we cannot reasonably expect to obviate the effects. True, the multiplicity of factors which tend, singly and collectively, to bring about the nervous deterioration which is the anatomical basis of the disease, may appear bewildering to the student, but it will widen his point of view and assist him in grasping the clinical significance of the particular manifestations with which he is confronted.

The author has adopted the only trustworthy plan of dealing with the subject, viz., by relating judiciously selected cases. Thanks to a good literary style, the author has succeeded in investing his theme with interest, and although he does not pretend to have exhausted the subject, he has said enough to convey a comprehensive and fairly adequate idea of this complex morbid state.

ABDOMINAL EXAMINATION. (*b*)

Considering the ease with which, in women of ordinary build, the position of the fœtus *in utero* can be made out by abdominal palpation, and the number of years that the procedure has been taught at the Continental schools of obstetrics, it is difficult to resist a feeling of surprise, with a twinge of humiliation, at its introduction, by the author, as "a subject which receives, as a rule, only passing attention." Even Professor Murdoch Cameron, in his introduction, commends the author for having "abstained from pressing crude ideas into notice," as though the method had not years since been carefully worked out to a practical conclusion by Pinard, of Paris, and others.

The fact is that Great Britain possesses no real school of obstetrics, and students are left in great measure to pick up their practical knowledge as best they may. Otherwise no student would be admitted to the profession without a good working knowledge of the abdominal method of obstetrical diagnosis.

In spite of the fact that attention has over and over again been called to the practical utility of this method, it is dealt with, if at all, only in a perfunctory manner in the popular text-books and—a far more important point—the student is only exceptionally instructed in its application. It remained for the author to write the first work in the English language on the subject, and we urgently commend it to the careful attention of students and practitioners.

Of course it is not proposed that the external or abdominal method shall take the place of vaginal examination, although, as a matter of fact, the information it yields is, as a rule, far more conclusive than the latter. Still, it has its limitations, and the author, in our opinion, goes a good deal beyond its strictly legitimate application. Better too much than too little, however. We would only suggest that it would not be difficult to provide better illustrations than the blotchy photogravures which are all he supplies in the present edition.

TURNER'S MANUAL OF ELECTRICITY. (*a*)

The appearance of a third edition of this book is a sufficient warrant of its excellence. The aim of the author has evidently been to produce a practical work on the subject, a purpose for which he is eminently fitted by a long experience as a teacher and examiner in the Edinburgh University. The body of the book is occupied by a clear description of the electrical principles, the apparatus, and the special methods involved in medical electricity. There is no need to enter into any detailed criticism of a well-known book of this kind in its third edition. At the same time it may be said generally that the medical man who takes the trouble to master the contents of this volume will be in a position to appreciate at its proper value the art of electro-therapeutics. The importance of the subject is growing daily with the rapid extension of scientific knowledge of the facts relating to the physics, the physiological action and the therapeutics of electricity. Under the section dealing with the reactions of nerves and muscles we miss any mention of the classical researches of Duchenne and Von Ziemssen. The section upon electro-therapeutics is valuable and up-to-date. A similar remark may be made of the chapters on the Röntgen rays, which give a capitally condensed account of principles, methods, and applications. We notice, by the way, that the author falls into the curious error of stating that the Jackson focus-tube was introduced after the announcement of Professor Röntgen's discovery. As a matter of fact it was in existence for a considerable time before 1896. Some of the author's illustrations are interesting and one or two show excellently what good work was obtained even in the early stages of investigation. The author's illustrations of the Dunfermline shooting case, in which he demonstrated by oblique irradiation the presence of a bullet buried near the spine, recalls an early observation which at the time had considerable suggestive and original value. Dr. Turner's book may be confidently recommended to all who are in want of a handbook in this particular province of medicine.

INTERNATIONAL CLINICS. (*b*)

The difficulty of giving a reader a true picture of the wealth of information one of these volumes contains is very great. Every branch of medicine is dealt with:—Therapeutics, medicine, surgery, obstetrics, gynæcology, and in a series of special articles the organisation of the Medical Department of the U.S.A. Army is dealt with by Dr. Manson, whose great work, "Military Hygiene," finds a place in every good library. Dr. Kelly writes of the management of a modern private hospital, and Dr. Borissoff recounts the original work on digestion, and tells of the wonderful experiments that Professor Pavlof, of St. Petersburg, has been carrying out. We think the publication is one well deserving of the support of the members of the medical profession,

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(*a*) "Clinical Lectures on Neurasthenia." By Thomas D. Savill, M.D., Physician to the West-End Hospital for Diseases of the Nervous System. London, &c. Second Edition. Price 5s. net. London: H. J. Glaisher.

(*b*) "Abdominal Examination and Manipulation in Surgery." By Alexander Maclennan, M.B., C.M., Clinical Assistant to the Professor of Obstetrics and Gynæcology at the University of Glasgow, &c. London: Rebman, Ltd. Price 6s. net.

(*a*) "Manual of Medical Electricity." By Dawson Turner, B.A., M.D., M.R.C.P., &c., Lecturer in Experimental Physics, Surgeons' Hall, Edinburgh; Examiner Edinburgh University; in charge of Electrical Department, Edinburgh Royal Infirmary, &c. Third Edition. 12s. 6d. London: Bailliere, Tindall and Cox.

(*b*) "International Clinics. A Quarterly of Illustrated Clinical Lectures and specially prepared articles." By Leading Members of the Medical Profession throughout the World. Edited by Henry W. Cattell, A.M., M.D., Philadelphia. Volume II. Twelfth Series. 1902. London: J. B. Lippincott Co.

both from the intrinsic value of the articles and their practical character. Each volume is complete in itself, and we look on them as among our most valued books. But we think that the editor would have been well advised to have left out the "selected prescriptions"—readers of the "International Clinics" do not require such. And we cannot say that we admire the biographical sketch. We care not what are the hours of sleeping and eating of a medical celebrity. On page 226 we find the Cheselden operation called the Chesterton, an obvious typographical error, but one that is to be regretted in a high-class periodical. We have told all that we disapprove of, but space does not admit of our telling of all the excellent and original articles it contains, both suggestive and helpful.

CLINICAL METHODS. (*a*)

This second edition has been materially revised and some important additions have been made. The authors, however, were well advised in not attempting to bring a work of this kind too abreast of the times, in view of the difficulty which exists in deciding forthwith what of the new is good and is likely to be durable.

The author disclaims any intention to write a treatise on medical diagnosis, but since this work aims at describing the methods of clinical investigation by which a correct diagnosis can alone be arrived at, it is not easy to differentiate.

The plan adopted is to select a particular organ or system and to go, stage by stage, over the various points to be observed in connection therewith, indicating the conclusions to be drawn from special signs and appearances. That is done in the briefest possible manner consistent with lucidity, and the text is elucidated by upwards of 150 illustrations and eight coloured plates.

This compact little book, of convenient size and solidly bound in the familiar red covers, may be trusted to impart a working knowledge of this very important branch of medical study. It is in reality an amplification of the Hippocratian maxim that medicine consists wholly of observation.

PHYSICAL DIAGNOSIS. (*b*)

The science of close and accurate observation is so intimately related to medicine, so indispensable to progress for a student, and to success for a practitioner, that its acquisition must be desired by all. It is, of course, embodied in the ordinary text-books, since it is the foundation of diagnosis, but it is well that so fundamental a science, in reality a "frame of mind," should be viewed apart, and made the subject of special study.

The shortcomings of previous editions have been remedied in this, the third edition, in the light of experience, and the author has added, among others, chapters on the examination of the blood, on the cranial nerves, and on clinical bacteriology which brings this otherwise excellent treatise up to date. The number of illustrations has also been materially increased.

As a guide to the physical examination of the sick we know of none to surpass this popular manual. The text is lucid and free from redundancies. It can be cordially recommended to the student desirous of becoming proficient in the elements of diagnosis.

OUTLINES OF PRACTICAL PHYSIOLOGY. (*c*)

This edition, dedicated to the celebrated French physiologist, M. Charles Richet, has been revised and enlarged, the additions bearing more especially on the experimental part, free use having been made of all the works on practical physiology published since the last edition. Under title of "The Physiology of the Senses" the subject of physiological psychology has been adequately dealt with—adequately, that is to say, from the students' point of view.

The illustrations, which number upwards of 460, consist largely of the various apparatus made use of in experimental physiology and of diagrams of the results obtained therewith.

The work is essentially a practical one. Its object is to enable the student to master the steps by the aid of which the details of the physiological processes are worked out. Even when it may be thought unnecessary to repeat the experiments, it is none the less necessary to grasp the nature of the data upon which the conclusions have been arrived at.

The body of the work defies detailed criticism. We can only say that it bears evidence on every page of conscientious work and careful scrutiny of current work. The volume is already too well known to need further commendation at our hands.

NEW BOOKS AND NEW EDITIONS.

The following have been received since the publication of our last list:—

Felix Alcan (Paris).

Les Obsessions et la Psychasthenie. By Dr. Pierre Janet. Pp. 764. Price 18 francs.

Les Nouveaux Traitements. By Dr. J. Laumonier. Pp. 280. Price 4 francs.

J. B. Bailliere et Fils (Paris).

La Profession Médicale. By Paul Brouardel. Pp. 228. Price 3fr.50.

Bailliere, Tindall and Cox (London).

Selected Papers on Operative and Clinical Surgery. By the late William Stokes, M.D. Edited by William Taylor, B.A., M.B., with memoir of author by A. Ogston, M.D. Pp. 484. Price 10s., net.

J. and A. Churchill (London).

Malarial Fevers of British Malaya. By Hamilton Wright, M.D. McGill. Pp. 98. Price 3s., net.

J. B. Lippincott Co. (London).

Internatonal Clinics. Vol. III. Edited by Henry W. Chattell, M.A., M.D. Philadelphia. Pp. 306. Price 10s. 6d.

Longmans, Green and Co. (London).

The Morals of Suicide. By Rev. J. Gurnhill, B.A. Vol. II. Pp. 220. Price 5s. net.

Transactions of the Clinical Society of London. Vol. 35. Pp. 235.

M'Corquodale and Co., Ltd. (London).

Metropolitan Asylums Board. Annual Report, 1901. In two vols. Price 5s.

Young J. Pentland (Edinburgh and London).

Manual of Bacteriology. By Robert Muir, M.A., M.D., F.R.C.P. Ed., and James Ritchie, M.A., M.D., B.Sc. Third Edition, with 150 illustrations. Pp. 548.

W. B. Saunders and Co. (Philadelphia and London).

The Elements of Bacteriological Technique. By J. W. H. Eyre, M.D., M.S., F.R.S.Ed. With 170 illustrations. Pp. 371.

Diseases of the Pancreas and their Surgical Treatment. By A. W. Mayo Robson F.R.C.S., and B. G. A. Moynihan, M.S. Lond., F.R.C.S. Illustrated. Pp. 293.

Sherratt and Hughes (Manchester).

The Pharmacological Action and Therapeutic Uses of the Nitrates and Allied Compounds, including the Croonian Lectures for 1893. By the late Daniel John Leech, M.D. Lond., D.Sc. Vict. F.R.C.P. Edited by R. B. Wild, M.D. Lond., &c. Pp. 187.

University Press (Liverpool) and Longmans, Green and Co. (London).

Second Progress Report of the Campaign against Mosquitoes in Sierra Leone. By M. Logan Taylor, M.B., Ch.B. Pp. 13. Price 1s.

Report on the Sanitary Conditions of Cape Coast Town. By M. Logan Taylor, M.B., Ch.B. Pp. 19. Price 1s.

Williams and Norgate (London).

Cancers and other Tumours of the Breast. By Charles Creighton, M.D. With 24 lithographic plates. Pp. 296. Price 20s. net.

Medical News.

Irish Medical Schools' and Graduates' Association.

A complimentary dinner to Lord Roberts was given by the members of this Association in the Great Hall of the Hotel Cecil on Wednesday last, when an unprecedented number of members and their lady friends joined in the gastronomic fray. The chair was occupied

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(*a*) "Clinical Methods." By Robert Hutchison, M.D., M.R.C.P., Assistant Physician to the London Hospital, &c.; and Harry Rainy, M.A., F.R.C.P.Ed., F.R.S.E., Univ. Tutor in Clinical Medicine, Royal Infirmary, Edinburgh. Price 10s. 6d. London: Cassell and Co., Limited. 1902.

(*b*) "Gibson and Russell's Physical Diagnosis." Third Edition, Revised and Rewritten, by Francis D. Boyd. C.M.G., M.D., F.R.C.P.Ed., Assistant Physician, Edinburgh Royal Infirmary. Edinburgh: Young J. Pentland. 1902.

(*c*) "Outlines of Practical Physiology." By William Stirling, M.D., D.Sc., Brackenbury Professor of Physiology and Histology in the Owens College, and Professor in Victoria University, Manchester. Fourth Edition. Price 15s. net. London: Charles Griffin, Ltd. 1902.

by Sir Philip Smyly, the president, and among those present were Lady Aileen Roberts, Sir P. Hutchins, Sir William Turner, president of the General Medical Council, Sir William Thomson, Mr. Justice Wills, Sir James Crichton Browne, Lord Headley, Lieut.-Colonel W. Babtie. The event of the evening was the presentation to Captain Crean, V.C, R.A.M.C., of the Arnott Medal founded in 1900, for award by the Council for an act of heroism or distinguished service in civil life or in the services. The medal, which was described by the president as the professional Victoria Cross, was presented by Lady Aileen Roberts, and was suitably acknowledged by Captain Crean, who looked in the best of health and spirits. In response to the toast of "Our Guests," Lord Roberts spoke in appreciative terms of the many tokens of esteem which he had received from his fellow-countrymen, and thanked the members for their kindly reception. Although not born in Ireland, he said he was of Irish descent, and it was a special pleasure to him to see before him some of the Irish medical men who went out to South Africa to help the sick and wounded, of the excellence of whose work he was gratefully cognisant. It was also a peculiar pleasure to him to see so many medical gentlemen whom he had met in South Africa—Sir William Thomson and Dr. Stoker, of the Irish Hospital, and Mr. O'Callaghan, of the Langman Hospital, and he knew what excellent work they and many others did. He then referred to the death of Sir William Stokes, who had lost his life in South Africa, where doubtless Sir William McCormac had also laid the seeds of his fatal disease. The proceedings throughout were of the most enthusiastic character, and every credit is due to Dr. J. H. Swanton, the honorary secretary, for the eminently satisfactory way in which the organisation of this huge gathering was carried through.

A Sale of Practice Dispute.

An action was tried in the Nisi Prius Court, at Liverpool, last week, in which Mr. Thomas Godley, L.R.C.P., L.R.C.S.Edin., now of Blackpool, sought to recover the balance of the purchase money of his practice at Bolton from Mr. Robert Harding Rains, M.R.C.S. The defendant, on the other hand, claimed damages for fraudulent misrepresentation. The practice, which was stated to have brought in about £800 a year, was mainly of the sixpenny class. The defendant appeared to have been afforded every opportunity of ascertaining the nature of the practice before concluding the purchase, and the jury ultimately gave a verdict in favour of the plaintiff for the amount claimed.

Chloroform Catastrophe.

Mr. Turberville Buckle, M.B.Lond., L.R.C.P., M.R.C.S., of Vicarage Villas, Willesden, was found dead in his bed one morning last week. He was holding a handkerchief to his mouth, and at the bedside was a partially emptied bottle of chloroform. It is surmised that in the endeavour to procure sleep he inadvertently inhaled an overdose. At the inquest a verdict of death from misadventure was returned.

Central Midwives Board.

Privy Council Office, Nov. 25th, 1902.

In pursuance of Section 3 of the Midwives Act, 1902, the Central Midwives Board has been constituted as follows:—

Names of Members.	Appointed by
W. J. Sinclair, Esq., M.D. Miss Jane Wilson	Lord President of the Council.
F. H. Champneys, Esq., M.D....	Royal College of Physicians
J. W. Cousins, Esq., F.R.C.S.	Royal College of Surgeons.
E. P. Young, Esq., M.R.C.S., L.S.A.	Society of Apothecaries.
Charles J. Cullingworth, Esq., M.D., F.R.C.P. ...	Incorporated Midwives' Institute.
J. H. Johnstone, Esq., M.P.	Association of County Councils.
Miss Rosalind Paget... ...	Queen Victoria's Jubilee Institute for Nurses.
Miss Dorothea Oldham ...	Royal British Nurses' Association.

Deaths Under Chloroform.

A lad, aged 15, died at the General Hospital, Birmingham, under chloroform, administered for the removal of adenoids. A post-mortem examination has been ordered to determine whether death was due to the anæsthetic or to the passage of blood into the larynx. We have often insisted on the undesirability of employing such an anæsthetic as chloroform for this trivial operation, since nitrous oxide amply suffices; indeed, it is hardly necessary in most cases to induce anæsthesia at all. At an inquest held on the body of a girl, aged 12, who had died under chloroform at the Westminster Hospital, it was stated that the heart continued to beat eight hours after breathing had ceased, and death was attributed to paralysis of the centre of respiration due to chloroform.

Nobel Prize Award.

Three of the Nobel prizes have this year been awarded as follows: Medicine and Physiology: Dr. Finsen, the Danish physician whose method of curing lupus, &c., by exposure to light has been so successful. Chemistry: Dr. Emil Fischer, of Berlin, one of the world's leading chemists. He is fifty-one years of age, and has devoted himself principally to organic chemistry, with particular reference to the constitution of sugar stuffs. Physics: Dr. Orrhenius, of the Stockholm High School.

An Anti-Sanatorium Action.

The tenant for life of a large settled estate at Bexhill-on-Sea has brought an action against Dr. Wills to prevent him carrying on a private hospital for chest complaints at Marine Mansions in such a way as to be a nuisance. It appears that the house has been converted into an establishment for the open-air treatment of consumptives, for whose benefit the windows have been taken out and the balconies placed at their disposal for day and night use. The front of the house is brilliantly lighted by electricity and attracts considerable attention. Judgment has not yet been delivered.

Carbolic Acid to be Scheduled.

The Departmental Committee on Poisons, it is reported, are prepared to recommend the inclusion of carbolic acid in Schedule 3 of the Pharmacy Act. This anticipation, if realised, will accomplish a much-needed reform, and may do something to lessen the appalling number of deaths from the ingestion of this poison, by accident or otherwise.

Death under Ether.

A man, aged 41, who was about to undergo an exploratory operation at St. Bartholomew's Hospital for a growth in the neck pressing on the trachea, was anæsthetised by means of gas and ether, but six minutes after anæsthetisation was commenced the breathing became embarrassed. Although tracheotomy was at once performed, he died. The tumour in question weighed upwards of twenty ounces, and, it is stated, would in any event soon have caused death.

Dublin Death-Rate.

The deaths registered in the Dublin registration area for the week ending Saturday, November 22nd, 1902, represent an annual death-rate of 32·6 in every 1,000 of the population. There were 32 deaths from tuberculous disease; 32 from disease of the nervous system; 52 from diseases of the respiratory system; and 23 deaths from diseases of the circulatory system; 119 infants died during the week, of whom 68 were under one year old. In the City dispensary districts the death-rate was as follows:— Lisburn Street District, 41·6 per 1,000; Blackhall Place District, 46·1 per 1,000; Castle Street District, 39·6 per 1,000; and in Peter Street District, 47·8 per 1,000.

Trinity College, Dublin.—Michaelmas, 1902.

Final Examination in Medicine.—Anthony H. Corley, Demetrius Jacovides, Henry T. Brady, Thomas W. Crowley, William I. de C. Wheeler, Arthur A. Burrell, Bertram L. Middleton, John H Torney, Charles A. Stone, William Leggett, John H. Askins, Edward V. Cullen, Nicholas M. Cummins, Joseph Wallace. M.B. Degree.—Henry A. Hanan.

Notices to Correspondents, Short Letters, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

IN the Pass List which we published last week the name of Miss May Thorne was erroneously given as Miss Thom.

M.R.C.S., L.R.C.P.Lond.—The consultant's action was, perhaps scarcely courteous, but it does not appear to constitute a breach of the well-defined ethical rule applying to such cases.

DR. LE SAGE.—To have been explicit, under the circumstances, was the only course which you could adopt. The fact that the patient made use of the information is a regrettable incident in the affair, but nevertheless one which, in the end, is likely to prove beneficial to our correspondent.

AN ANCIENT STORY.

A FEW years ago, at the presentation of the prizes of the Medical School at University College, Dr. Lyon Playfair being present, Mr. G. Shaw-Lefevre, M.P., told the following story:—"In 1739 a quack, named James Steven, professed to have discovered a medicine for curing a painful disease, and he puffed it so successfully that Parliament passed an Act awarding him £5,000 on condition that he would inform a Royal Commission of the nature of his remedy. The Royal Commission consisted of an archbishop, ten bishops, the Lord Chancellor, three Ministers of State, five peers, and ten men of science. In due time the Royal Commissioners reported that they had examined the remedy and found it to be of great utility and benefit. The £5,000 was awarded to Mr. Steven. The reputed remedies consisted of three items - a powder, a pill, and a decoction. The powder was a mixture of pulverised egg-shells and snail-shells: the pill was composed of egg-shells, soap, and honey; while the decoction was made up of soap and a substance called 'swines' cresses.'"

Meetings of the Societies, &c.

LONDON.

WEDNESDAY, DECEMBER 3RD.

OBSTETRICAL SOCIETY OF LONDON (20, Hanover Square, W.).—8 p.m. Specimens will be shown by Dr. Blacker, Dr. Giles, Dr. Lewers, Dr. W. C. Swayne, Dr. Sikes, and Mr. Malcolm. Short Communication:—Dr. V. Bonney: Dermoid Cyst containing a large number of Epithelial Balls. Paper:—Dr. G. E. Herman and Dr. H. R. Andrews: A Contribution to the Natural History of Dysmenorrhœa.

THURSDAY, DECEMBER 4TH.

HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Titchborne Street, Edgware Road, W.).—8.30 p.m. Discussion on the Surgery of Acute Appendicitis; opened by Mr. C. B. Lockwood.

NORTH-EAST LONDON CLINICAL SOCIETY (Tottenham Hospital, N.).—4 p.m. Clinical Cases.

RONTGEN SOCIETY (20, Hanover Square, W.).—8.30 p.m. Mr. Isenthal will show the Nodon Electic Valve for Converting Alternating into Continuous Current. Dr D. Walsh: An Observation bearing upon the Therapeutic Action of the Focus Tube. Paper:—Mr. S. Mayou: X-Rays in Ophthalmic Work (with lantern slides).

NEUROLOGICAL SOCIETY OF LONDON (Physiological Laboratory, University College).—8.30 p.m. Meeting.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies Street, W.C.).—5.30 p.m. Mr. Berry: Diseases of the Thyroid.

FRIDAY, DECEMBER 5TH.

WEST KENT MEDICO-CHIRURGICAL SOCIETY (Royal Kent Dispensary, Greenwich Road, S.E.).—8.45 p.m. Mr. A. Bowlby: The Simulation of Intestinal Obstruction (Purvis Oration). Conversazione. Demonstrations:—The President and Mr. L. Eastes: Some Clinical Tests and Scientific Methods of Cultivation of Bacteria. Mr. J. J. Vezey: X-Ray, High Frequency Electrical, and Vibro-Therapeutical Apparatus, and Finsen Lamps. Messrs. Arnold and Son will exhibit Surgical Instruments.

LARYNGOLOGICAL SOCIETY OF LONDON (20, Hanover Square, W.).—5 p.m. Cases Specimens, and Instruments will be shown by Dr. L. Turner, Mr. W. R. H. Stewart, Mr. A. H. Burt, Dr. S. Spicer, Mr. F. J. Steward, and others.

TUESDAY, DECEMBER 9TH.

WESTMINSTER HOSPITAL (Broad Sanctuary, S.W.).—4.30 p.m. Mr. Paton: Surgical Cases. (Post-Graduate Clinical Demonstration.)

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies Street, W.C.).—5.30 p.m. Mr. Tubby: Injuries to the Spine.

THURSDAY, DECEMBER 11TH.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM (11, Chandos Street, W.).—Clinical evening. Cases, &c., by Messrs. Mayou, Edridge-Green, Charles Blair, Bernard Potter, Ernest Maddox, Sydney Stephenson, N. C. Ridley, and E. T. Collins.

FRIDAY, DECEMBER 12TH.

THE SOCIETY FOR THE STUDY OF DISEASE IN CHILDREN (11, Chandos Street, W.).—5 p.m. Special Meeting for the Discussion of Tuberculous Peritonitis.

DUBLIN.

FRIDAY, DECEMBER 5TH.

ROYAL ACADEMY OF MEDICINE IN IRELAND.—Pathological Section:—Dr. H. Collett and Professor O'Sullivan: Cancer of Ovary. Dr. Earl: Sarcoma of Suprarenal Capsule. Drs. Maunsell and Earl: Carcinoma of Transverse Colon. Dr. Earl: Obstruction of Cystic Duct. Dr. Benson: Intra-ocular Tumour.

Appointments.

GORDON, WILLIAM, M.D.Cantab., Physician to the West of England Eye Infirmary.

HARSANT, WILLIAM HENRY, F.R.C.S.Eng., Honorary Consulting Surgeon to the Bristol Royal Infirmary.

LYSTER, C. R. C., M.R.C.S., Medical Officer to the Finsen Light and X-ray Department at the Middlesex Hospital.

MOLE, HAROLD F., F.R.C.S.Eng., Surgeon in charge of the Ear Department, Bristol Royal Infirmary.

MORGAN, D. J., M.B., B.C.Cantab., Pathologist at the Cancer Hospital, Fulham Road.

PICKARD, RANSOM, M.D., M.S.Lond., F.R.C.S.Eng., L.R.C.P.Lond., D.P.H.Cantab., Honorary Assistant Surgeon to the West of England Eye Infirmary, Exeter.

ROPER, ARTHUR CHARLES, F.R.C.S., L.R.C.P.Edin., M.R.C.S.Eng., Honorary Surgeon to the West of England Eye Infirmary, Exeter.

SHERREN, JAMES, F.R.C.S.,Eng., Assistant Demonstrator of Anatomy at the London Hospital Medical College.

SWAIN, JAMES, M D., M.S.Lond., F.R.C.S.Eng., Honorary Surgeon to the Bristol Royal Infirmary.

SYKES, WALTER, L.R.C.P., L R.C.S.Edin., L.F.P S.Glasg., Resident Surgical Officer to the Birmingham and Midland Eye Hospital.

Vacancies.

Borough Asylum, Canterbury.—Assistant Medical Officer. Salary £120 per annum, with furnished apartments, board, and laundry. Applications to the Medical Superintendent, Borough Asylum, Canterbury.

City Asylum, Birmingham.—Assistant Medical Officer. Salary £150 per annum, with board, apartments, and washing. Applications to the Medical Superintendent.

County Asylum, Dorchester.—Second Assistant Medical Officer. Salary £140 and all found. Applications to the Medical Superintendent.

County Asylum, Whittingham, Preston, Lancashire.—Junior Assistant Medical Officer. Salary £150, with furnished apartments, board, washing, and attendance. Applications to the Medical Superintendent.

Grimsby and District Hospital.—Resident House Surgeon. Salary £100 per annum, board, lodging, and washing. Applications to J. F. Wintringham, Hon. Secretary, St. Mary's Chambers, Great Grimsby

Haydock Lodge Asylum, Lancashire.—Assistant Medical Officer. Salary £175 per annum, furnished quarters, board, washing, &c. Applications to Dr. Street, Haydock Lodge, Newton-le-Willows, Lancashire.

Hertfordshire County Asylum, Hill End, near St. Albans.—Junior Assistant Medical Officer. Salary £160 a year, with board, furnished apartments, and washing. Applications to the Medical Superintendent.

Hospital for Sick Children, Great Ormond Street, London, W.C.—Resident Medical Superintendent. Salary 100 guineas per annum, with board and residence in the hospital and £5 washing allowance. Applications to Adrian Hope, Secretary.

Manchester Royal Infirmary.—Resident Medical Officer at the Convalescent Hospital, Cheadle. £150 per annum, with board and residence. Applications to W. L. Saunder, General Superintendent and Secretary.

Rochdale Infirmary (54 Beds).—Resident Medical Officer. Salary £100 per annum, with board, residence, and washing. Applications to the Hon. Secretary, R. W. Shaw, Esq., Southfield, Rochdale.

Southampton Incorporation.—Resident Assistant Medical Officer. Salary £100 per annum, with apartments, rations, washing, and attendance. Applications to David P. Gwillim, Clerk to the Guardians, Clerk's Offices, Workhouse, Southampton.

The Middlesex Hospital Cancer Research Laboratories.—Junior Pathological Assistant. Salary £100 per annum. Applications to F. Clare Melhado, Secretary-Superintendent.

Western General Dispensary, Marylebone Road, N.W.—Senior House Surgeon. Salary £100 a year, with board, residence, and laundry. Applications to the Hon. Secretary at the Institution.

Births.

HART-SMITH.—On Nov. 25th, at 99, Wickham Road, Brockley, S.E., the wife of Humphry Morshead Hart-Smith, M.B.,B.C.Cantab., of a daughter.

THORNE THORNE.—On Nov. 27th, at 45, Inverness Terrace, Hyde Park, W., the wife of Leslie Thorne Thorne, M.D., of a son.

WOOD.—On Nov. 28th, at Eastwood, Ferry Road, Edinburgh, the wife of Thomas Wood, J.P., M.B., C.M.Edin., of a daughter.

Marriage.

BATTLE—LLEWELLYN.—On Nov. 27th, at St. John's, Coleford, Gloucestershire, Dr. E. Wharmby Battle, 27, Hamstead Road, Handsworth, son of the late J Key Battle, of Hyde, Cheshire, and of Lincoln, to Catherine Ann Llewellyn, youngest daughter of Mrs. Buchanan, Bank House, Coleford.

Deaths.

BUCKLE.—On Nov. 27th, at Willesden, suddenly, William Turberville Buckle, M.B., aged 58.

JOHNSON.—On Nov. 25th, at Westbourne Park, London, W., Mary Susan, widow of the late F. H. Johnson, M.R.C.S., L.R.C.P., &c., of Sunderland, in her 83rd year.

LITTLE.—On Nov. 27th, at Bank House, Buglawton, Congleton, David Little, M.D., F.R.C.S., of 2, St. John Street, Manchester, and Court Heath, Buxton, aged 62.

STEPHEN.—On Nov. 28th, at 54, Evelyn Gardens, S.W., George Caldwell Stephen, M.D., L.R.C.P., D.P.H.Camb.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

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Original Communications.

SYPHILIS AND LIFE ASSURANCE.[a]

By **BYROM BRAMWELL, M.D., F.R.C.P., F.R.S.E.,**

Physician to the Edinburgh Royal Infirmary, &c.

The main questions to be determined were: (1) *Does syphilis tend to shorten life*, not merely in individual cases, but considering syphilitic individuals in a mass? and (2) *If so, to what extent?* Unless these questions are settled with some degree of accuracy it is impossible to give a rational and scientific answer to the question. (3) *On what terms shall assurance companies accept syphilitics?* Considering the extreme frequency of the disease it was remarkable how divergent were the views of physicians on the subject, some thinking that syphilis should in no way influence the rate of premium, and others holding a very opposite view. Most medical advisers refuse to accept cases of primary and secondary syphilis and bad cases in which tertiary symptoms have appeared, while they accept at ordinary rates cases of syphilis which have been effectively treated, and in which a sufficient time has elapsed to render the further appearance of symptoms unlikely. This practice seemed to the speaker entirely illogical on account of the possibility of later nervous symptoms developing. In his opinion syphilis shortened life, and a person who had suffered from it should not be taken as a first-class life, as it was quite impossible to foresee the risks. The only exceptions were cases in which the disease had been contracted very many years previously, or in certain cases of short-term policies. Syphilis might kill and shorten life in different ways—(1) by typical tertiary lesions, particulary those affecting the nervous system; (2) post or para-syphilitic lesions, of which tabes, general paralysis of the insane, and aneurysm were the most important, with, in addition, such other para-syphilitic manifestations as aortic regurgitation, cirrhosis of the liver, possibly cirrhosis of the kidneys, insanity, &c., and probably more subtle degenerative changes which diminish the resistance and vitality of syphilitics. Dr. Bramwell showed statistical tables of his own cases, which confirmed those published by Naunyn in showing that tabes, general paralysis and aneurysm occurred most frequently during the first ten years after infection. During this period the greatest extra premium was required, during the second decade a less one, while during the third decade very little extra might be required. At present insurance statistics were of little or no value in showing whether syphilis shortened life. In Dr. Muirhead's analysis of the mortality in the Scottish Widows' Fund from 1888·94, no death was ascribed to syphilis. It might be taken for granted that nowadays primary syphilis was never fatal, though in the past it had been so in some cases, from sloughing, sepsis, &c. Secondary syphilis was rarely fatal, though the writer had made a post-mortem examination of one such case, and it might also indirectly lead to death by suicide on account of the mental depression it sometimes caused. In the same way the mental and physical depression might indirectly predispose to infection with tubercle. Practically, deaths due directly to syphilis were always caused by its tertiary manifestations. These used to be thought to be of late occurrence, but this was now known not to be the case, and in the great majority of instances they developed within ten years of infection—in many within the first year or two. The frequency of tertiary symptoms might be taken at about 10 per cent. of all cases of syphilis, and in an average case of tertiary syphilis life was shortened by about ten years. Only a small part of the mortality of the disease, however, was due to the tertiary lesions, most was due to tabes, general paralysis, aneurysm, cirrhosis of the liver, &c. Tabes was due, in at least 75 per cent. of cases, to syphilis, and in a series of his cases in which the exact date of the infection and that of the onset of the symptoms was known, it appears that in 15 per cent. of the cases these arose within five years, in 40 per cent. within ten years, and in 67 per cent. within fifteen years after infection. In thirty-two fatal cases of tabes the average duration of life from the onset was 8·8 years, and in the seventeen of these in which the date of infection was known it was found that the expectation of life at that date exceeded the actual duration by an average of fifteen years. As regards general paralysis he had no statistics of his own to go upon, but taking the mortality in the Scottish Widows' Fund, and assuming that the infection was contracted at the same average age—twenty-seven—as in his later cases, the average diminution of life was nineteen years. Aneurysm was very often due to syphilis, and so was aortic disease; in fact, where there was no evidence of rheumatism it was almost always probably syphilitic. He thought that the combination of gout and syphilis was very unfavourable, and that it was not unlikely that if an alcoholic man was also syphilitic he was much more likely than a non-syphilitic to suffer from cirrhosis of the liver. He also laid great stress on the less-known degenerative results of syphilis. The far-reaching character of the disease must profoundly alter the tissues and render them more liable to the inroads of disease. Such was seen when prolonged worry induced the onset of general paralysis in a syphilic. Waxy disease was, as was well known, also due on many occasions to syphilis. In conclusion, he thought that syphilis undoubtedly shortened life, but how far it was now impossible to say. Since the mortality is always indirect, a statistical inquiry by assurance offices would be long and difficult, but would be possible, and he strongly urged that such should be undertaken. Among points which might be discussed, Dr. Bramwell enumerated—(1) The influence of mercurial treatment in preventing tertiary and para-syphilitic lesions. (2) Does the severity and persistence of the secondary symptoms afford a guide as to the probability of subsequent tertiary and para-syphilitic lesions? (3) When a history of syphilis is disclosed, the importance, for the purposes of assurance, of regarding:—(*a*) The physique and constitutional tendencies; (*b*) the family history; (*c*) the health of the proposer's children; (*d*) the habits; (*e*) the occupation, circumstances, and surroundings of the proposer.

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[a] Abstract of a Paper read before the Edinburgh Royal Medico-Chirurgical Society, December 3rd. Report of proceedings will be found in another column.

RADICAL CURE OF HERNIA IN YOUNG CHILDREN. (*a*)

By D. KENNEDY, F.R.C.S.I., L R.C.P.I.,
Surgeon, Children's Hospital, Dublin.

Although the operation of "radical cure of hernia" seems to have been brought as nearly perfection as possible, and, although most surgeons will not treat hernia in adults nowadays otherwise than by operation, yet young children with rupture are almost invariably left for treatment to the tender mercies of the instrument maker. The principal reasons for this appear to me to be, first, a hope that the wearing of a truss will in time effect a cure; secondly, that the operation for radical cure in children is considered dangerous, and consequently should only be resorted to in very exceptional cases. Both these reasons I hold to be fallacious, and the hope of doing something to dispel that fallacy is my excuse for this communication to you to-night.

With regard to hernia in children being cured by wearing a truss, I am of opinion it is the exception, and not the rule. Although a cure does occasionally result after years, I hold the treatment by operation is far less dangerous and far more surgical than treatment by trusses; because, so long as a child has a necessity for wearing a truss, so long is he exposed to the danger of the hernia becoming strangulated. And, besides this danger of strangulation, there are many and grave objections to a child being condemned to wear a truss for an indefinite period. Principally among these objections are (1) The truss causes a great deal of irritation about the groin, ending very frequently in troublesome eczema. This irritation makes the child irritable and fretful, and consequently prevents thriving. Secondly, it is impossible to prevent the truss getting sodden with urine and fæces, and it becomes, in consequence, most objectionable and dangerous. Thirdly, the pressure of a truss, strong enough to keep up an ordinary hernia, prevents the muscles from developing in the neighbourhood of the inguinal canal, and consequently, the abdominal wall is weakened, and large ruptures are liable to occur later in life. Fourthly, the expense of getting a truss frequently, as will have to be done as the child grows, is sometimes more than poor people can bear. But, the greatest of all objections to a truss in a child is that it is rarely effectual in keeping up a hernia, and then it does more harm than good. I have met many such cases with the hernia down, and kept down so long as the truss was worn.

These difficulties in connection with a young child wearing a truss are quite apparent to anyone who does much practice with children. And in proof of this I will refer you to the article on hernia in the recent surgery by Cheyne and Burghard. The writer of that article lays down that it is rarely an infant can wear an ordinary truss; consequently, he recommends as a substitute, either a skein of worsted or a flannel bandage, to be changed, of course, as often as the child micturates. I think, gentlemen, this may be called grandmotherly surgery, and I am sure would not commend itself to me nor to the mothers of the children. The only solution is early operation, and what I mean by early, is, any time from the fourth month onward. The earlier done, the more perfect the cure, the less liability to recurrence, and the better development will there be of the abdominal muscles.

With regard to the dangers of the operation, they are to a large extent imaginary outside those which exist in the same operation with adults. I have carried out the operation on at least sixty cases under five years of age, and at least a dozen of these were under twelve months old. I never had a death, never had any sepsis, beyond rarely a stitch abscess; the patients all left hospital between the ninth and fourteenth days, and although I have made many inquiries about the children since operation I know of no case of recurrence. What I have heard invariably was, that the children were much quieter and throve much better after than previous to operation.

I will not weary you with the details of these cases, as repetition becomes monotonous, but will give you some particulars of the younger ones.

Case I.—T. K., æt. 5 months, came to me from Templemore last March. He was suffering from large double inguinal herniæ and phimosis. Both herniæ were present from birth, and the mother of the child told me a truss was quite ineffectual, though her doctor had procured her several. I admitted him to the private ward in Temple Street Hospital, and the day following operated on the right side. I found a large congenital hernia, with a very thick sac. I reduced the hernia, opened the sac, and then I found lying in the sac a very large vermiform appendix. Afraid kinking might occur if I reduced this appendix, and also afraid that it would hardly have room in the infant's abdomen, I resected it. I then, after dealing with the sac and canal, closed the wound and healing was perfect in eight days. Two days subsequently I operated on the left side, when I found an infantile hernia, the sac within sac variety, and at the same operation I performed circumcision, and ten days afterwards, that is, twenty days from his first operation, I showed the little patient here at the Academy, with his vermiform appendix in a bottle. Since that time he has never looked back.

Case II.—J. D., came to Temple Street Hospital, suffering from right inguinal hernia and phimosis. The little patient was six weeks old, was emaciated, and the mother told me very irritable. He wore a truss, which was not effectual in keeping up the hernia. The mother told me that she tried several trusses, without any better result. I circumcised the child, and gave instructions to have him back in three months' time. This was done, when I carried out a radical cure, and the child left on the ninth day, being then perfectly well, and under five months old.

The subsequent history of this child is interesting. Six months after operation I was sent for to go and see the child to his home, and was told the rupture had returned. I found a rupture, but on the other side. I again had him admitted to Temple Street Hospital, and I again carried out the radical cure with perfect success. Since that time, about eight months ago, he has had no trouble as far as I know. I was told that after birth the child had both ruptures, but that

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(*a*) Paper read before the Surgical Section, Royal Academy of Medicine in Ireland, November 14th, 1902.

after a few weeks the left one disappeared, and only appeared again when the child began to make efforts to walk.

Case III.—Infant, æt. 6 months, sent to the Children's Hospital by Dr. Brew, of Bray. The child suffered from inguinal hernia, and a note was sent by the doctor saying that a truss was ineffectual. I carried out a radical cure, and the child left hospital on the eleventh day, his wound completely healed.

Case IV. — A girl, æt. 3, suffering from a large umbilical hernia, sent by Dr. Lyons, of Dunlavin, with a note requesting operation to be performed. I carried out the operation, resecting a large flap of skin with the hernial sac, vivified the edges of the opening in the abdominal wall, and united it by sutures of silkworm gut passed through all the layers, including the peritoneum, as after a laparotomy; the child left hospital in a fortnight perfectly well.

Case V.—A. D., æt. 16 months, came to the outpatient department of the Children's Hospital; his mother said that he was very ill. He suffered from left inguinal hernia, and was wearing a truss. On examination I found the hernia strangulated and admitted him at once to the hospital. Taxis failing to reduce the hernia, chloroform was administered, and I did herniotomy, at the same time carrying out the radical cure. The child was very ricketty and emaciated, and could not be kept quiet after the operation. In consequence hæmorrhage occurred into the scrotum, and twenty-four hours afterwards sloughing of the scrotal tissues appeared imminent. I again put him on the operation table, chloroform was again administered, and I removed the testicle, leaving the wound in the scrotum to granulate. His hernia wound healed by first intention, and he subsequently made a perfect recovery. I met two other cases of strangulated hernia, without any gangrene in the bowel being present, on both of which I operated, and both of which made an uninterrupted recovery. In these three cases of strangulated hernia, the patients wore trusses.

Case VI.—Just three weeks ago, as I was leaving Temple Street Hospital on a Thursday morning, I was asked to see a child in the waiting-room. The mother told me the child was ruptured and that he was ill all night; that he was vomiting, seemed to be in great pain, had no motion from the bowels for twelve hours in spite of a dose of castor oil, and passed no urine. On examination I found a very large scrotal hernia on the right side, completely irreducible. The infant looked very ill, and all the evidences of a strangulated hernia were present. I explained to the mother that I would have to administer an anæsthetic to the child, and that, failing a reduction of the hernia, I would operate. She left the hospital to get the consent of her husband, taking the infant with her, and did not return till the following morning. She was then agreeable to anything necessary being done with the child. When I saw him again, he looked dying. The mother told me all the symptoms had persisted during the previous day and night, and was most positive the child had passed no urine for thirty-six hours. I had him brought straight to the operating theatre and operated. I found a congenital hernia, strangulated at the neck of the sac. The bowel was discoloured but not gangrenous, and behind the bowel I found again an enormous vermiform appendix. After reducing the bowel I resected the vermiform appendix, closed the sac and the inguinal canal in the usual manner, and I am happy to tell you the child has made an excellent recovery. It is only eight months old. In this operation, as in many of the others, I was ably assisted by my friend and colleague Dr. Lewis More O'Ferral. The operation lasted about forty minutes. There was no urine in the bladder at the time of operation.

From these cases you will see that there is little to be apprehended from carrying out the "radical cure" in infants or young children. There are, however, a few points which appear to me to be essential to the success of the operation. First, no hæmorrhage should be allowed to take place; secondly, the operation should be carried out as quickly as possible, consistent with attention to details, and in a thoroughly aseptic manner; and, lastly, the anæsthetic should be properly administered. I especially insist that the child is not allowed to become half conscious at intervals during the operation, as I believe this to be productive of great shock. I have the child fully under the influence the whole time. I invariably use chloroform. Collapse after the operation has been conspicuous by its absence. Pain was not usually present to any great extent, and, if present, was easily relieved by small doses of chloral hydrate.

Contrary, I daresay, to your expectations, and, I may add, to custom, I am not going to describe or discuss any new method of dealing with either the sac or canal, which will in future be known as Kennedy's operation. I carry out as simple a procedure as possible. I never allow my skin incision to go to the scrotum; I ligature and resect the sac, and use no means to fix it in the abdominal wall; I close the canal, after McEwen's method, and I do not displace the cord. I invariably circumcise the child. In dealing, however, with congenital hernia I met with an unexpected difficulty in my earlier cases. This was due to the complete union of the elements of the cord with the posterior wall of the hernial sac, making it impossible to separate one from the other. I have found this condition present in every case of congenital hernia I have operated on, and, in consequence, I have long since given up attempting to isolate the sac from the cord in these cases. This is a condition not usually dwelt on in textbooks, or by men who have described methods of "radical cure of hernia." It seems to me impossible in these cases to carry out the twisting or invaginations of the sac, which are so elaborately described by some operators, or even to have the sac ligatured in its entirety. I would like to have the opinion of the members of this section of the Academy as to what is best to be done in these cases. I draw down the sac as well as possible after freeing it round the internal abdominal ring. I transfix it, and pass a ligature in front of the cord, as high up as I can get, I then divide the sac transversely above the scrotum, leave the lower part to form a tunica vaginalis, and dissect away all I can of the part lying in the inguinal canal below the ligature. This practically leaves the posterior wall of the sac as it was before.

With regard to the after-treatment I have little to say. I cover the dressing and bandage with protective. There is usually no need to change the dressing oftener than every second or third day. I usually fix the child in a Bryant's splint; this keeps him quiet, and materially assists the nursing. I remove the stitches on the sixth or eighth day, and, needless to tell you, I do not recommend a truss to be worn for any time whatever.

In conclusion, I may say that I did not adopt this method of operating on almost all cases of hernia in children without giving treatment by trusses a fair trial. The results were most disappointing. It was a continuous go from me to the truss maker, and from the truss maker back again to me. On the other hand, the more cases I have operated on, the more pleased I am with the results, and the more determined I am to "throw" trusses, like "physic, to the dogs."

PURULENT MEDIASTINITIS.

By PROFESSOR KOPFSTEIN,
Of the University of Vienna.

THE subject of my paper is "Mediastinitis," and more particularly the form which has run on to suppuration in the anterior space. Inflammation in the anterior mediastinum may, of course, be due to several causes, and the process involves a number of important structures, such as the remains of the thymus, the ascending aorta, the superior vena cava, the innominate veins, and the phrenic nerves. The inflammation may arise from neighbouring structures, such as the heart, or posterior mediastinum, which are also subject to acute inflammatory changes, the latter often arising from carcinomatous ulceration of the trachea and œsophagus, or the ulcer may be caused by perforation of some oreign body. There are also congestions, abscesses, and other morbid changes which often take place in the spinal vertebræ.

I am enabled to bring before you four cases which recently came under my own observation in which I operated.

The etiology of these cases may be classed under three heads, viz., injury, surroundings, and infection, or, more properly, metastases.

All these causes may give rise to purulent mediastinitis, and all of them may subside by resolution without pus formation, although Hare, who has carefully examined the whole of the literature on the subject, finds records of 115 cases of purulent inflammation in the anterior mediastinum and only sixteen non-purulent.

According to Hoffman traumatic mediastinitis becomes purulent much less than any of the other forms. Goodhart, however, records a very acute case of mediastinitis with bilateral pleuritis and pericarditis which ended in suppuration. The patient was fifty-seven years of age, and had had an accident, a piece of timber striking him on the left side of the chest. Hoffmann relates another interesting case, that of a male, æt. 27, who began to complain of pain over the region of the sternum, due to pressure from a stud in his shirt. The skin was red over the sternum, but no active lesion was found on the skin. In the course of three weeks after this occurrence high fever with swelling about the whole length of the sternum appeared with slight crepitation. An incision was made at the side of the sternum and pus was evacuated, and the whole space cleared out, but the patient succumbed from sepsis at the end of the fourth week. The post-mortem revealed purulent matter in the whole of the cavity with pericarditis, but nowhere could the origin be located.

A very common cause is to be found in the second class, where a neighbouring organ, such as the pleura or pericardium, becomes implicated, and this directly involves the mediastinum by purulent or pathogenic matter which may be conducted thither by the blood or lymphatic vessels. Phlegmon of the trachea is a not uncommon cause, as the pus can readily pass along the layers of fibrous tissue to the mediastinum. The fibrous sheaths along the large vessels, such as the common carotid, the jugular veins, &c., are also sources of danger to this prævisceral space, which may also be involved by inflammation of glands, larynx, trachea, or any inflammation of tissues about the hyoid bone. The sequelæ of other diseases, such as caries, tubercle, perforation, &c., &c., may also give rise to mediastinitis.

We now come to the third class of causes, which includes all the specific, as well as the non-specific fevers, such as rheumatism, pneumonia, &c.

The symptoms are usually associated with pain over the sternal region radiating through to the dorsal surface, and locating itself more particularly between the shoulders. This symptom must be interpreted with care, as an abscess in the posterior mediastinum will also produce pain between the shoulders which may appear to give rise to irritation of the intercostal nerves. Another symptom is intense pain experienced at every cardiac systole. In acute cases there is generally fever, rigors, and perspiration. The whole course is usually acute when there is no pus adhesion form followed by shrinking and consequent displacement of the heart. On the other hand, when pus forms, breathing is laboured and shallow, with an irregular pulse. If no issue be mechanically afforded, pus may point at the side of the sternum in one of the intercostal spaces, or the abscess may perforate the trachea, bronchi, lung, pleura, or pericardium. Very few of these cases recover. The tuberculous form is attended with the least pain.

The diagnosis is admittedly very difficult, depending largely on the previous history, but the presence of pain and fluctuation may assist. The prognosis, under any circumstances, is usually bad, as death by sepsis or perforation of an important organ determines a fatal result.

The treatment must of necessity be largely empirical until pus has formed and the diagnosis conclusively proved. The first step would be a "Priessnitz" compress over the sternum. Galenus suggested trepanning the sternum and exploring for pus. When fluctuation appears in any of the intercostal spaces it should be early opened and the abscess evacuated, enlarging the opening as far as possible. With this object Heyfelder has practised resection of the sternum in fifteen cases with the best results. Milton has sawn through the sternum in the middle and chiselled a portion out on both sides.

PURE ETHYL CHLORIDE
AS A
GENERAL ANÆSTHETIC,
WITH SPECIAL REFERENCE TO ITS USE IN MIDWIFERY.

By JAMES BURNET, M.A., M.B.EDIN.,
M.R.C.P.EDIN.
Formerly Resident Physician, Royal Infirmary, Edinburgh.

ETHYL chloride is produced by heating ethylic alcohol with H.Cl. under pressure. Its use as a local anæsthetic has been known for some time, but quite recently it has been used for purposes of general anæsthesia in its chemically pure form. Absolutely pure ethyl chloride is technically known as kélène.

Some time ago Dr. H. F. Parker published a short account (*a*) of its use as a general anæsthetic in 140 cases. In August he wrote an article (*b*) confirming his previous experience of the drug. He had seen altogether 500 operations performed where kélène was used, and in only a small percentage was it found lacking. He mentions incidentally that it should prove useful in obstetric practice. With a view to testing its suitability in midwifery I have administered it in six consecutive cases. It must be admitted this is a very small number from which to make practical deductions; still, I am anxious to give my experience that others may be induced to make trial of this new anæsthetic for themselves in their midwifery practice.

Four of the cases were multiparæ, the other two were primiparæ. In three of the cases forceps were

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(*a*) "St. Bart.'s Hosp. Journal," Feb., 1902. (*b*) *Ib.*, Aug., 1902.

used, while in the other three the anæsthetic was administered in order to relieve the patient's sufferings. It must be understood that the cases were not selected in any way, but represented a fair average, such as any general practitioner might be called upon to attend.

The method of administering the kélène was that adopted by Malherbe, of the Hôpital Trousseau, Paris. A pocket handkerchief is folded four times in order to form a compress, which is then placed flat in the palm and 5 c.c. of the anæsthetic sprayed upon it. The palm, with the compress resting on it, is placed over the patient's nose and mouth. A mask, however, is sold for special use in administering kélène, but as I had not one in my possession I resorted to what I consider the simplest and at the same time the safest of methods.

The first case in which I used kélène was in a 3-para. On arrival at the patient's house I found the head presenting and pretty low down. As she kept calling out for chloroform I administered 5 c.c. kélène. In one minute she was sufficiently under its influence to admit of forceps being applied to the head. I had some little difficulty in applying the second blade as the patient moved about a good deal. In ten minutes the child was born. She had altogether 10 c.c. of kélène. Other two of the cases were primiparæ. In one I gave kélène in order to relieve the sufferings of the patient as the head was being born. I found 5 c.c., followed at a short interval by 3 c.c., sufficient. The patient told me afterwards that she felt no pain whatever after I administered the anæsthetic. The second primiparous case is interesting in some respects, as here kélène was used as a preliminary to a somewhat prolonged chloroform anæsthesia. The patient in this case had a narrow pelvis. She had been in labour for twenty-four hours. The cervix was with difficulty got to dilate. As the head was presenting and no progress seemed to be made, after waiting for two hours I decided to apply forceps. She was given 5 c.c. of kélène. The anæsthetic, however, did not seem to produce the same muscular relaxation obtained after chloroform. With considerable difficulty I got the lower blade in position, but by this time the patient was becoming restless. She accordingly was given another 5 c.c. This enabled me to apply the second blade. Traction was then commenced for five minutes or so; the patient seemed quite unconscious, but soon after this she began again to struggle. As the case was hardly suitable for further experimentation seeing I was working single-handed, I decided to use chloroform. The first whiff brought the patient fairly well under its influence, and though she was kept anæsthetised for nearly two hours, traction being made on the head at intervals, she made an excellent recovery. The patient certainly seemed to require less chloroform than is usual in such cases, and there was less after-sickness, in fact, in this patient's case the sickness was scarcely worth mentioning. I need hardly add that she made an excellent and rapid recovery.

The other three cases were multiparæ, in one of which forceps was used, and in the other two cases I merely gave the anæsthetic to soothe the patient and to render her pains less intense, more particularly while the head was being born. Working, as I was forced to do in all these six cases, without any assistance, save what was given by the nurse in attendance, I was unable to make use of kélène so extensively as I should have wished. More especially is this to be regretted in the case of the primipara, where I had to resort to chloroform for this very reason. Then again, it must be remembered that I had no mask. In four of my cases I was able to estimate the pulse, and in no instance did I find any marked interference with its character. Respiration likewise was unaffected. Only one of the patients showed slight signs of mental excitement, but as she was a very nervous woman I do not think the anæsthetic was altogether responsible for this manifestation.

The special point which I wish to emphasise is that I did not obtain such complete muscular relaxation with kélène as obtained by using chloroform. This was particularly noteworthy in the cases where forceps were applied. At the same time, however, I feel certain that where the patient has to be kept under the influence of an anæsthetic for any length of time it would be a distinct gain to start with kélène, and after this preliminary state to resort to chloroform. Less of the latter will then suffice, and much valuable time will be saved in the preliminary stages. The anæsthesia produced by kélène is wonderfully rapid. I should say that less than two minutes suffice to reduce the sensibility of the patient. It is very important that the patient should breathe only air charged with ethyl chloride vapour, as, if pure air is mixed with it, then the anæsthesia will take a much longer time to produce. A proper mask is therefore very useful; but for midwifery practice, in my opinion, is not altogether indispensable. The best time to begin the administration is when the patient has a "pain," as she is then inclined to cry out, and in so doing breathes deeply, and so inhales more of the vapour.

After my short experience with this comparatively new drug, I prefer chloroform for ordinary cases; but where the case is likely to prove a long one, and the patient requires an anæsthetic, I should feel justified in starting off with kélène preparatory to chloroform administration. For minor operations pure ethyl chloride is an ideal anæsthetic. Its action is rapid, and its administration safe and pleasant for the patient.

OBSTRUCTIVE DYSMENORRHŒA.

By ALEXANDER DUKE, F.R.C.P.I.

No complaint to which the human female is liable can give more pain and distress than dysmenorrhœa, the most common form being the obstructive. The best treatment and the one affording the most lasting relief, and in very many cases permanent cure, is dilatation of the entire cervical canal, and the wearing of an intra-uterine stem pessary in order to maintain that dilatation for a considerable period. I have now had a fair amount of experience in the treatment of this feminine affliction, and several years ago I designed a rapid uterine dilator, which in my own hands has given good results, combined with the use of my spiral wire uterine stem, to keep the canal patulous and retain the dilatation necessary to the cure.

This I consider the all important point. I have seen cases in which both incision and dilatation had been practised sufficiently to admit index finger into uterus, which, in a few months' time was quite as bad as ever, and pain as severe at periods as before operation.

Not long since I read a paper of Dr. Herman's on this subject, in which he states, "The local treatment of spasmodic dysmenorrhœa is to dilate the cervix, this is best done by the passage of bougies." May I ask has he tried every other plan? I regret to say I cannot agree with his statement, as I consider if the amount of dilatation necessary can be gained (as I maintain it can) by the use of an instrument, it will be a great improvement on being obliged to use several (the frequent insertion and withdrawal of such straight solid dilators into a curved and stenosed cervix, the most tolerant uterus will naturally resent).

I quite agree with the statement made by the late Lawson Tait: "It means sitting by the bedside of the patient for hours, and exercising a deal of force to the exhaustion of himself as well as the infliction of much pain on the patient."

I have always held that in order to obtain a permanent cure in these cases we must conquer for good all the uterine spasm and contraction, and I know of no better plan than rapid dilatation and the direct subsequent insertion and wearing of my "spiral wire stems" till such are no longer gripped, but will move freely up and down in cervix (the time, of course, varying in different individuals), when it can be removed. And I make bold to say that the effect of the sustained dilatation will be far more lasting, and more likely to end in permanent cure than intermittent dilatation with bougies even at a month's interval.

Another advantage I claim for stems is their action as drainage tubes, and straightness of any flexion that may co-exist; the drainage often curing the endometritis commonly observed in these cases.

As a rule, patients of mine are entirely free from pain while stem is in position and kept clean; and in two severe cases of "membranous dysmenorrhœa" no membrane whatever was observed (the next period) after introduction of stem or while worn, and one of the two (wife of a medical man) conceived and bore a son.

As I have stated elsewhere, "I have had patients wear the stems for over a year (inspected by me of course at intervals) without the smallest discomfort, and some ride the bicycle utterly unconscious of the presence of any foreign body (which, I think, could not be said of any other form of uterine stem with which I am acquainted).

A catheter tied into a male strictured urethra, for even a short time, will do more to dilate the stricture than the introduction of same at frequent intervals; and a spiral wire stem (if the proper size be chosen) will dilate, and keep dilated (at least so long as worn) a cervical canal, giving free exit to the secretions and menstrual discharge, and ensuring more lasting results in addition when removed than any other treatment for obstructive dysmenorrhœa with which I am acquainted.

Transactions of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Mr. Peter Horrocks, President, in the Chair.

Meeting held Wednesday, December 3rd, 1902.

SARCOMA OF INVERTED UTERUS.

Dr. W. C. Swayne (Bristol) showed a specimen from a nullipara, æt. 17, who was admitted to the Royal Infirmary, supposed to have been recently in labour. On examination a tumour was found projecting from the vagina, which proved to be the inverted uterus covered with a large soft growth and associated with a large vesico-vaginal fistula. The patient was extremely weak from hæmorrhage, &c. The growth proved to be a mixed-cell sarcoma. In view of the probability of there being metastatic deposits surgical intervention was not considered advisable, and she sank and died. Post mortem, no metastatic deposits were found, and there was no obvious reason why the growth should not have been removed. The uterus was completely inverted, and its body replaced by a growth. Specimen shown.

CYSTIC FIBROID OF BODY OF UTERUS.

Dr. Swayne also showed a specimen removed from a multipara, æt. 52, who came complaining of metrorrhagia with fœtid discharge. She was extremely debilitated, and there was an abdominal tumour reached to within three fingers' breadth of the umbilicus, soft and doubtfully fluctuating. He explored the uterine cavity and then curetted, but the hæmorrhage recurred within a fortnight. He then performed panhysterectomy, and while dragging the tumour through the wound a large amount of fluid escaped, and on tapping he withdrew 25 fl. ounces. The fluid came from a large cyst, and there was much myxomatous degeneration. The patient was doing well.

Dr. Griffith suggested that it would be interesting to have a complete drawing of the appearances of the inverted uterus.

Dr. Spencer asked what was supposed to be the cause of the fistula. He was disposed to question whether the growth was really a sarcoma. On examining the sections he did not feel sure that the growth was not an ordinary fibroma of the uterus, and this view was supported by the absence of metastatic deposits, which were practically always present with sarcoma.

STREPTOCOCCAL ICTERUS IN A CHILD.

Dr. Sikes showed a specimen from an infant, a few days old, under the care of Dr. Pollock. The mother was admitted to Queen Charlotte's Hospital a few days before delivery with a "bad cold," and the child displayed the same symptoms, and six or seven days after birth developed severe jaundice to which it succumbed. Post mortem, the liver and spleen were found to be very slightly enlarged, and bacteriological examination showed numerous streptococci. The sections of liver substance showed much pigment. The case was reported as one of streptococcic jaundice with great accumulation of bile in the body.

FIBROMA OF THE OVARY.

Dr. Arthur Giles showed this specimen, which was removed from a married woman, æt. 30 The patient had been married six months, and for five months had suffered from menorrhagia, pelvic pain, bladder disturbance, and obstinate constipation. On examination she was found to be suffering from multiple uterine fibromyomata, and abdominal hysterectomy was performed. The right ovary was then found to contain a solid tumour the size of an egg, and was removed with the uterus; the other ovary was left behind. The chief points of interest about the ovarian tumour were, first, its association with uterine fibroids; secondly, the well-developed capsule of ovarian tissue, which Dr. Fairbairn had shown to exist in almost all these cases; thirdly, the close association of the growth with the inner pole of the ovary and the ovarian ligament. Microscopically it presented the structure of a pure fibroma. The patient made a satisfactory recovery.

A CONTRIBUTION TO THE NATURAL HISTORY OF DYSMENORRHŒA.

Dr. G. E. Herman and **Dr. H. Russell Andrews** compared a number of cases of dysmenorrhœa cured by dilatation of the cervix with a number of others in which dilatation of the cervix produced no benefit. They find no reason to think that dysmenorrhœa curable by dilatation is frequently associated with imperfect development of the uterus. Also that dysmenorrhœa curable by dilatation begins with the establishment of menstruation in about two-thirds of the cases, and is acquired later in about one-third; that it almost always begins before the age of twenty-five, but may be acquired at any age. They find that the result of treatment is not materially affected by the length of time the dysmenorrhœa has lasted, the age of the patient when treated, or the duration of her married life. In most cases cured by dilatation the time of commencement of pain is very near the time of commencement of the flow, while in most of the cases not cured by dilatation the pain begins two days or more before the flow. In half of those cured by dilatation the pain is over in less than two days; in more than half of those not cured by dilatation the pain lasts more than four days. In four-fifths of those cured by dilatation the pain is paroxysmal; in three-fourths of those not cured by dilatation it is constant. In most of the cases cured by dilatation the pain is not relieved by lying down. The authors give details showing the severity of the pain Only a few patients were known to pass membranes, and that in only a few were there physical signs of disease. They find no evidence of such narrowing of the cervical canal as to mechanically hinder the flow of blood through it. It is possible that some degree of smallness and rigidity of the canal may hinder the physiological dilatation of the canal which should take place during menstruation, and so provoke painful contractions of the uterine body; but they are unable to adduce evidence of this. They give tables showing the known duration of cure in the cases on which the paper is based, and the number of cases in which pregnancy followed dilatation in married women who were previously sterile.

The President observed that scarcely anything in medicine or gynæcology could be reduced to a simple rule, there being so many exceptions, and the subject of dysmenorrhœa was not less difficult to classify. He thought that it was generally agreed that if the pain were intermittent dilatation would relieve, and that, he took it, implied that the dysmenorrhœa was of uterine origin. The worst forms of the disease, however, were ovarian, and then the pain was more or less constant, but, he added, there were many exceptions. He asked to what extent dilatation was carried; the condition of the uterus, and steps taken to make the dilatation permanent? In dysmenorrhœa of uterine origin he himself had dilated before an expected period up to No. 9 Hegar, and this often relieved the pain. In order to render the relief permanent he generally slit the cervix deeply down to the posterior fornix and then made a lateral incision less deeply, so as to divide the cervix into three quarters and one quarter. The great thing was to cut through the circular fibres twice. Referring to the authors' remark that the presence of membranes did not materially influence the treatment, he said that he attached great importance to membranes, and in such cases he did not think dilatation did much good. Curetting, followed by the application of carbolic acid, &c., was required. Referring to the observation that no obstruction sufficient to prevent escape of blood was ever met with in dysmenorrhœic patients, he said that short of absolute obstruction one did meet with cases in which the cervical canal was so narrow as to cause severe dysmenorrhœa. When blood clots were present in the uterus something in the nature of labour pains were required to effect their expulsion. It was not correct to say that when the body of the uterus contracted the cervix dilated, for it merely relaxed, and unless there were something to open it—fœtus, clot, &c.—it remained closed. He mentioned the case of a girl with an exceedingly rudimentary uterus—practically none at all—and no vagina, who suffered severely every month, and was cured by the removal of the ovaries. In that case, if there had been a uterus he would have ascribed to it a uterine origin. He thought dilatation and slitting the cervix should always be tried before resorting to more severe measures.

Dr. Heywood Smith believed that acute anteflexion might cause dysmenorrhœa, and insisted that the operative procedure should be to divide the internal os, because splitting the external os produced the very condition which tracheloraphy had been devised to remedy.

Dr. Boxall mentioned the case of a patient at University College Hospital, under Sir John Williams, who was kept under observation for some months for typical severe dysmenorrhœa. She had a well formed clitoris, with under-developed vagina and uterus and no ovaries at all. On opening the abdomen rudimentary testicles were found, so nothing was done and the wound was closed and the pain did not recur. He observed that with a very rudimentary uterus, if it were dilated, pregnancy might and often did occur.

Dr. Arthur Giles said that the paper served a useful and practical purpose in defining the cases of dysmenorrhœa in which dilatation was likely to prove useful. Its non-suitability in cases in which the pain chiefly preceded the flow was readily explained, because such pain was congestive in origin: and congestion was not likely to be cured by dilatation. The cause of painful contractions was obscure, and to understand them it would be necessary to know why uterine contractions during labour were painful. He was interested in Dr. Boxall's cases, but was inclined to think his experience was unusual. From a careful investigation of a number of these cases his experience was that the striking features of menstruation with under-developed uterus were late onset, scanty flow, and freedom from pain, and the patients were nearly always sterile.

Dr. Galabin pointed out a number of fallacies to which the classic symptoms might give rise, and observed that the so-called spasms of pain were often of comparatively long duration, very unlike the uterine contractions with which they were familiar.

Dr. Lewers pointed out that the absolute measure of dilatation, according to the number of Hegar, did not take them very far, because in some instances it was possible to introduce them with comparative ease up to a high number, while in others resistance was soon experienced. The dilatation proper did not begin until resistance was overcome.

Dr. Griffith said they were discussing a subject which had no definite limits. They were supposed to be discussing dysmenorrhœa, but on listening to the paper it became apparent that the authors in reality only dealt with the treatment of certain cases of spasmodic dysmenorrhœa. There was probably no subject of which the average man was so ignorant as that of dysmenorrhœa. The views held were sometimes imaginary, sometimes antique, and they were copied from one book into another without any attempt to control their accuracy. He recalled the fact that on one occasion when he showed a specimen consisting of a dilated uterus the late Dr. Graily Hewitt had expressed great interest therein, because it was, he said, the first dilated uterus he had ever seen, his own drawings having been made from clinical observation. He discussed the extreme variability of the symptoms, and urged that they were not entitled to talk of membranes or clots unless they had been examined microscopically, for patients' utterances in reference thereto were utterly untrustworthy. He had frequently demonstrated that behind the so-called "pin-hole" os there might be a normal canal. The cases of pure dysmenorrhœa without menstruation, if only they were more frequently met with, might perhaps give them a clue to the real nature of this obscure affection. He did not agree that the cases could be divided into those with backache and those with spasms nor that the backache cases were most likely to be relieved by dilatation. The difference in the intensity of the pain was probably more a matter of individual idiosyncrasy than of actual intensity, just as some women complained bitterly of after-pains, while others thought nothing of them.

Dr. Briggs (Liverpool) confirmed the value of the incision treatment, although their experience in Liverpool had not been as successful as that achieved by the authors.

Dr. Herman agreed that the intensity of the pain was largely an individual matter. He had practised dilatation of the internal and external ores with good results. He had first used dilatation in cases in which incision had failed to relieve, and even in membranous dysmenorrhœa dilatation was still the most effectual treatment, though the cure was not always permanent. Even when a clot was present they could not know for certain that it was formed inside the uterus. He did not deny that anteflexion was often present in dysmenorrhœic patients, but it was quite as common in those who did not suffer therefrom.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Meeting held December 3rd.

Sir Thomas Fraser, President, in the Chair.

Dr Edwin Bramwell showed a man who had complained of weakness in the right arm for four or five months. There was weakness and wasting of the small muscles of the hand and of the long flexors, and also a patch of anæsthesia extending along the inner aspect of the right forearm, not, however, reaching the hand. The sympathetic was unaffected, such a combination of symptoms could not be due to a lesion of the peripheral nerves, and there were no symptoms of cord affection.

On the other hand, it was quite characteristic of a lesion of the first dorsal nerve root. There was no history of trauma. The prognosis in such cases was bad.

Dr. Melville Dunlop showed a case of unusually high temperature in an infant, due to intestinal decomposition. The child was admitted to hospital with diarrhœa, the stools being very offensive. Shortly after admission a convulsion occurred, and the temperature rose rapidly to 107·2°, falling again quickly. Head retraction became pretty well marked, and in a day or two a second convulsion took place, the temperature on this occasion reaching 108.6°. The treatment adopted consisted in irrigating the bowel and giving small doses of calomel, and as soon as the state of the motions became more satisfactory the nervous symptoms ceased.

Mr. George Chiene showed an infant, æt. 8¼ months, operated on four months previously for acute intussusception. The child was taken ill suddenly one morning at 9 a.m., and was admitted to hospital a few hours later. A sausage-shaped mass, about eight inches long, could be felt in the abdomen, but the rectal examination was negative, except that some blood-stained mucus was withdrawn on the finger. Abdominal section was at once performed, and the intussusception, which proved to be of the ileo-cæcal variety, was easily reduced. The operation was completed within four and a-half hours from the onset of the symptoms.

Mr. F. M. Caird showed (1) A man whose olecranon had been wired five and a-half months after the receipt of injury, because the union was fibrous and inefficient. Some little difficulty was found in overcoming the separation of the fragments caused by the contraction of the triceps, but the result was satisfactory, and the patient could now work, which formerly he had been unable to do. (2) A female, æt. 23 years, after excision of half the tongue and the glands of the side of the neck for epithelioma of seven weeks' duration.

Mr. David Wallace showed a patient who for many years had suffered from obscure abdominal symptoms. Pain latterly most severe in the right iliac fossa, and vomiting had led to the suspicion of appendicitis, but had subsided under rest in bed. He was again admitted to hospital, however, on account of an acute attack with pain, abdominal distension, and vomiting. On opening the abdomen two feet of the ileum were found intussuscepted into the colon, and at the apex of the intussusception there was a papilloma, about the size of a pigeon's egg. Knowing that these papillomata were seldom single, the neighbouring bowel was examined, and as it contained numerous similar tumours two feet of it were resected. The patient made a good recovery.

Dr. Chalmers Watson showed the case of lupus vulgaris previously brought forward to illustrate the efficacy of the myelocene treatment. Very marked improvement has taken place, chiefly, he thought, as the result of the action of myelocene on the pyogenic organisms to which the ulceration was due.

Dr. Atchison Robertson demonstrated a stethoscope adapted for the clinical instruction of from five to ten students simultaneously. It consisted of a chest-piece to which a phonendoscope and resonating chamber were attached, and which communicated with five or ten binaural stethoscopes.

Dr. Dawson Turner showed an apparatus for the production of high-frequency currents for the treatment of malignant and other diseases. The apparatus consisted of two induction coils, the one discharging into the other, a Leyden jar intervening as a condenser. A current alternating with enormous frequency—a million or more times per second—and of thousands of volts was thus obtained. Notwithstanding its high voltage it did not produce the ordinary sensory or stimulant effects on nerve and muscle. These currents were employed in three ways: (1) As a direct local application by means of electrodes of various patterns (demonstrated). (2) By auto-conduction, in which the patient lay in a metallic cage, round which the currents circulated, not coming in contact with the patient, but setting up induced currents in his body. (3) By auto-condensation, in which the patient was substituted for the condenser, lying between, but not in contact with, two metallic plates.

The following specimens were shown:—

Mr. David Walterston: Specimens illustrating the development of the brain.

Mr. George Chiene: (1) Splinter of wood found in the stool of an infant three days after operation for intussusception. (2) Photograph of case of intussusception. (3) Portion of gut resected from a child, æt. 1¾ years, for acute intussusception. (4) Intestine of child, æt. 9 months, operated on for acute intussusception, showing commencing gangrene.

Mr. Alexis Thompson: Melanotic cancer of parotid and cervical glands.

Mr. Caird: (1) Preparations from case exhibited, showing microscopic appearances of carcinoma of tongue and glands. (2) Cæcum, ilieo-cæcal valve, appendix, and portion of ileum removed from case of tuberculous appendicitis.

Dr. Chalmers Watson, photographs illustrating the treatment of lupus vulgaris.

Professor Annandale read a paper on "Some Practical Suggestions in Operative Surgery." The following were some points of practical importance designed to overcome certain of the difficulties met with in various operations. All of them had stood the test of many years' experience. (1) In connection with certain operations upon the nose, palate, and upper lip: In cases where it was desired to improve a deformity of the nose, and where there was considerable loss of tissue, the material might be got from one of the fingers by dissecting up a flap of skin and fixing it in position. In such cases the difficulty was to fix the hand so firmly that union should not be disturbed. The best way to do this was to control the movements of the wrist by a long posterior splint which extended beyond the finger tips and was secured to the forehead by a bandage passing round the head. The arm was at the same time bandaged to the side of the body, but this latter alone would not be found enough to hold the hand steadily in position. In making a new bridge to a nose there was often difficulty in preventing the tissues from falling in after they were sutured in position. To remedy this tendency he used a saddle-shaped piece of sheet lead, moulded so as to fit the nose, which through this and the enclosed tissues of the nose a needle was thrust transversely. By having the ends of the transfixing pin or screw threaded so that small nuts could be applied, lateral pressure could also be exerted and the nose moulded at will. After many plastic operations on the nose it was found that the upper lip tended to be drawn up so as to expose the teeth. The best way to prevent this was to fix it in position by nailing it to the alveolus of the superior maxilla during the healing of the parts. In uniting a cleft palate the greatest difficulty was usually found near the anterior part of the cleft, owing to the difficulty of getting a fixed point to which to attach the flaps. It would be found a help to fix one of the flaps to the raw palate by a nail before suturing so as to fix it. (2) In connection with some operations on the air passages: In extensive operations in the mouth, &c., it was often desirable to perform a preliminary tracheotomy, and various means were employed to prevent blood trickling down into the lungs. Some surgeons packed the whole wound, and others employed a special tracheotomy tube with an elastic balloon as obturator which could be inflated so as to block the trachea. This was apt to be punctured during the operation, and to collapse. He employed solid india-rubber balls of various sizes, one of which was put through the tracheotomy wound into the lumen of the trachea above, and served effectual to block it. The tracheotomy tube was adopted to allow of a foot or two of rubber tube being attached to it, and the anæsthetic was given through this, the anæsthetist being well out of the operator's way. (3) In amputation of the penis: The best way to prevent hæmorrhage was to twist an elastic band round the root of the organ and to transfix in front of this with an ordinary bonnet pin. If the organ was not transfixed or if the skin alone was transfixed, the *corpora cavernosa* and *spongeosa* retracted at once and great hæmorrhage occurred. (4) In connection with perineal drainage of the bladder: He was accustomed to allow the end of the perineal drain to rest inside the end of a piece of lead pipe which was long enough to extend from the perineum down over the foot of the bed and ended in a vessel which collected the urine. (5) In colotomy for incurable disease of the rectum, he thought that it was advisable to divide the colon completely and stitch up the lower end. Unless this was done, however large the spur which formed a certain amount of fæcal matter was sure to escape into the rectum and give rise to discomfort. (6) In those cases of undescended testicle in which it was thought desirable to replace the organ to the scrotum, the difficulty was to keep it there after the operation. He overcame the tendency to retraction by mooring it to the skin of the thigh with a stitch which kept up the requisite tension while the wound was healing. (7) In those cases of spina bifida in which the tumour was small and pedunculated, he advised the injection of Morton's fluid along with the constriction of the neck of the sac by an elastic ligature.

On the motion of the **President**, Professor Annandale was cordially thanked for his paper.

Dr. **Byrom Bramwell** read a paper on

SYPHILIS AND LIFE INSURANCE,

an abstract of which will be found under the heading of "Original Communications," page 621.

Dr. Bramwell's paper was discussed by Dr. Ritchie, Dr. Clouston, Dr. Affleck, Mr. Low, actuary, Mr. Hodsdon, and others. The practical difficulty that a history of syphilis is almost never obtained, even in reply to specific questions on forms, was mentioned, and all the speakers agreed with Dr. Bramwell in regarding syphilis as a disease which shortened life, and that those in whom it was discovered should not be accepted at ordinary rates, and also agreed as to the importance of a statistical inquiry such as he proposed.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Obstetrics.

Meeting held Friday, November 28th, 1902.

Dr. **Hastings Tweedy** showed the following specimens:—(*a*) Tubal Pregnancy; (*b*) Ovarian Cyst and Pyosalpinx; (*c*) Salpingitis (two cases).

Dr. **John Knott** read "Notes on a Case of Amenorrhœa."

Dr. **Elizabeth Beatty** described two cases of amenorrhœa which she had attended. One case was a very obstinate one, and had persisted for five years. Various remedies were tried, and finally treatment by electricity proved successful.

Drs. **Neill** and **McWeeney** on a case of

PUERPERAL ECLAMPSIA.

Catherine R., æt. 28, admitted on April 29th, 1902. Second pregnancy—first was natural, fifteen months ago. Patient was attended in the external department of the Coombe Hospital on April 20th by the Clinical Clerk about 10 p.m., who found her in a comatose condition, having had a severe fit. He administered ½ gr. morphia hypodermically, and had her removed to hospital without delay. On admission she was in a condition of deep coma, the contraction of the pupils however, not being very pronounced; the skin was dry, and the temperature subnormal—in the axilla the pulse being 63; she was not in labour. She was at once put into a wet pack and given croton oil ♏ j The catheter was passed, and about 7 ozs. of bloody urine drawn off. An enema of soap and water was given, which was retained. She was kept constantly on her side, and after two hours was taken out of the pack. She remained quiet until 3 a.m. of the following morning, when she had a severe fit, which lasted about 15 minutes. She was again put into the pack, and given ¼ gr. of morphia hypodermically. At 3.50 a.m. she had another fit, which did not last so long. She was then taken out of the pack, and at 4.15 had another fit; at 5.45 she was given a glycerine enema, which was also retained. At 6.30 she was again put into the pack and given ♏ j of croton oil. She remained perfectly quiet until 8.30, when the respirations were observed to be rather slow, the pupils also being dilated, the pulse remaining fairly good. She died rather suddenly and undelivered about 8.40 a.m., having remained unconscious from the time of her admission. The fœtal heart could not be heard. Percentage of urea in the urine was 0·8 per cent.

Dr. **Alfred Smith** said, in regard to its etiology, that the kidney was most frequently blamed for this disease, but he was very doubtful if this was always correct. The kidney in Dr. Neill's case was apparently normal, except for the congestion, which is frequent in cases of toxæmia, and that incompetence of the liver was probably to blame.

Dr. **Kidd** thought that a good deal might be said as to the liver being the cause, but we would wait a long time if we referred all cases of eclampsia to any one organ. He said that there must have been tremendous pressure on the ureters, but did not know if that had any bearing on it.

Dr. **Neville** said that the treatment seemed to him to be the point of interest. The strain on the right side of the heart must have been very great, and having seen a case of status epilepticus treated by bleeding from the forearm, which immediately gave very remarkable relief, he thought if it had been adopted in this case the patient might have survived the attack.

Dr. **Hastings Tweedy**, speaking of the toxæmic theory, said that Bouchard was the originator of it, and had entirely proved his case from his own point of view, but Bouchard's theory had been refuted, and now we were much less certain of the toxæmic theory. The great mistake Bouchard made was that he drew off the urine without any aseptic precautions; it is now found that every urine is toxæmic if left for any length of time exposed to the air. When drawn off with proper aseptic precautions eclamptic urine shows no toxin, and has no worse effect on rabbits, &c., than urine in normal health. The body naturally secreted poisons which had to be eliminated through the kidneys, but sometimes these organs appeared to be sluggish, and did not secrete as much as they should, and the result was seen in headaches, dyspepsia, &c., especially in women. These symptoms were cured by drinking warm water, and he thought that women should drink more fluid; the want of it was shown by headaches, then twitching, and finally eclampsia. In pregnancy not only had a woman to eliminate her own poisons, but also those of the fœtus, and this double dose, combined with the fact that her nervous system was then more excitable, made her a good subject for eclampsia. He referred to the difficulty which Dr. Neill had in getting the bowels of his patient to move with croton oil, and said that one drop was nothing; up to six or seven could be given. He thought that in some cases the poison was not in the blood, but deposited in the solid tissues, and therefore bleeding was of use, because it drew it into the blood stream. He doubted if pressure on the ureters could be the cause of eclampsia.

Dr. **Neill**, in replying, said that in these cases the kidneys were not always diseased, but that often they were. He then referred to a patient who was admitted to hospital suffering from albuminuric retinitis. She got well. She was two months pregnant, and developed eclampsia. Though she recovered from this, she became totally blind. She had five bad fits, then they ceased, and three weeks afterwards a macerated fœtus was expelled. There was a large quantity of albumin in the urine. In that case undoubtedly the kidneys were diseased. Other cases, he said, had shown large quantities of albumin, but it quickly disappeared. He never performed venesection; the patients were simply kept as quiet as possible. In nearly all the cases of eclampsia he had seen there had been very little post-partum hæmorrhage. He had seen a peculiar case in which death resulted apparently from eclampsia; the convulsions came on after the child was born. In this case there was very advanced tuberculous disease of the lungs. He said that 2 minims of croton oil were given, and at the post-mortem nothing was found in the bowels. The stomach was greatly distended with gas; the small intestine was empty. There was nothing abnormal in the abdominal cavity except the ureter, which was quite unrecognisable from its enormous distension.

CORK MEDICAL AND SURGICAL SOCIETY.

Meeting held Wednesday, November 26th, 1902.

Dr. P. T. O'Sullivan, President, in the Chair.

The **President** showed a case of ataxic paraplegia in a man, æt. 30. He said that about six months ago the patient began to complain of weakness in the lower limbs, and his gait became irregular. At present his gait was distinctly ataxic, the knee-jerk was increased and ankle-clonus could be obtained. The pupils were normal, and there was no history of alcohol or syphilis.

Dr. J. M. **Browne** showed a case of double congenital coloboma of the iris of a boy, æt. 10. In the right eye the iris alone was involved, but in the left deficiency extended back to the retina. The patient's grandfather and one of his brothers were similarly affected.

Dr. H. R. **Townsend** showed a dermoid cyst which he had removed two months previously from a child, two and a-half years old. The weight of the cyst and its contents amounted to 13 lbs., the weight of the child before the operation being 35 lbs., and immediately afterwards 22 lbs. Between six and seven pints of fluid were contained in the cyst. Immediately on removal of the tumour the patient collapsed badly, but owing to the vigorous application of restoratives by several assistants, and the rapid completion of the operation, she survived the shock and made a good recovery, and was shown at the meeting.

Several members commented on the large size of the tumour in so young a child.

Dr. J. **Cotter** showed a sarcoma of the kidney, which he had removed from a man, æt. 52. The tumour weighed 5 lbs., and had undergone cystic degeneration in parts. It was removed through a lumbar incision prolonged towards the front. A microscopic examination showed it to consist of large and small round cells, with some adenoid tissue.

GENERAL MEDICAL COUNCIL.

SEVENTY-FIFTH SESSION, NOVEMBER, 1902.

Sir W. Turner, President, in the Chair.

SIXTH DAY.—Monday, December 1st.

Report of Public Health Committee.

Dr. **Bruce**, Chairman of the Committee, brought up a report on various communications referred to them by the President, including one from the Advisory Board for the Army Medical Service, stating that the Board contemplated large and important changes in connection with sanitary administration in the Army. The Board proposed to establish a higher grade of Army medical officers, whose duty it would be to supervise the sanitary work of the ordinary Army medical staff; and it was desired that the Medical Council should sanction such additions to the present rules and regulations as would enable officers of the Army Medical Service to obtain a diploma in Public Health from any of the licensing bodies. In regard to the question of how far the scheme of education and training proposed by the Advisory Board corresponded to the regulations of the Council for candidates for the diploma of Public Health, it was stated that in the scheme the regulation as to the interval which must elapse before proceeding to the diploma in Public Health was more than safeguarded, and that, with six months' laboratory work, the scheme of the Advisory Board, as it stood, made provision for a period (in two portions) of altogether four months. Dr. Bruce stated that the Committee could not recommend any abridgment of this portion of special study as drafted in the regulations of the Council. The utmost they could agree to was that the first two months might be taken into account, but the balance of the time—that was four months—should stand. The Committee were informed that the Advisory Board should leave it optional to the candidates for these diplomas to prosecute their laboratory work at any University or medical school which possessed adequate means for prosecuting the study of the subjects required for this diploma. The Committee considered that it would be well that distinctions as between medical men acting in their capacities civil and military should, as far as possible, be removed, and suggested an addition to one of the rules with that object. They were satisfied that every medical officer in the Army had from the commencement of his service ample opportunities of acquiring a knowledge of methods of hospital administration in relation to infectious diseases They accordingly proposed that the following note be appended to Rule 4:—"In the case of a medical officer of the Royal Army Medical Corps, a certificate from a principal medical officer under whom he has served, stating that he possesses a practical knowledge of hospital administration in relation to infectious diseases, may be accepted as evidence under Rule 4."

In moving that the Committee's report be approved, Dr. Bruce pointed out that the proposed scheme was nearly parallel to the present organisation for Public Health in civil life, and it also implied a distinctly higher or honours grade of medical officers of health, which the Council had all along demanded, while not interfering with the present course followed by many Army doctors who, when on sick leave or otherwise, managed to work for and obtain a diploma in Public Health. It proposed to arrange that a limited number of military medical officers should be specially trained for such work, and it asked the Council to put the stamp of Public Health diploma upon those men who, after being examined by one of the qualifying bodies, had proved themselves fit and competent for such diploma. In recommending the acceptance of the scheme so far the only real difficulties that had troubled the Committee were (1) the limitation of the field of experience during the pupilage of the military candidates, and (2) as regarded the knowledge of sanitary law which did not come within the purview of the military authorities. But the Committee believed that an honest examination for a diploma in Public Health, properly conducted, would be a sufficient test of the candidate's fitness to hold such a diploma.

Lieut.-Colonel **Davies**, of the Advisory Board of the Army Medical Department, and Major McCulloch, the officer in the Army Medical Department who has specially to deal with sanitary returns, attended in order to give any further information that might be desired.

Mr. **Ball**, who seconded the motion, said the present Secretary of State for War had taken very great interest in the affairs of the Army Medical Department, and at Mr. Brodrick's instigation a Reorganisation Committee was formed, which Committee made very important suggestions for the improvement of their service. These suggestions were now being carried out, and they could hardly fail to attract to the service many of the better class of young practitioners. Of the reforms of a purely professional character which had, in consequence of the report, been established, he alluded first to the fact that on the site of the old Milbank Prison a staff college was being built, and also a hospital of considerable size. Laboratory instruction of the best kind would be provided at the college, which was intended not only for young officers on probation, but for officers at a later period of their service, so that officers on returning from foreign service should have an opportunity of revisiting the staff college for a further period of education. The next important point in the reorganisation scheme had been the appointment of specialists. The medical officer who showed that he was capable of really good work in any one of the many specialities that were named was encouraged to devote himself more particularly thereto by the fact that he received an increased fee if he qualified as a specialist, and that he could obtain an acceleration of his promotion on purely professional merits. Of the many special subjects the Advisory Board considered that sanitary science was extremely important. A new class of officers had been created called sanitary staff officers. For the present provision was being made for nineteen of these officers. They had no duties to perform in sanitary matters, and they would be assigned to large Army Corps districts at home and commands abroad solely to look after the welfare of the district in which the troops were stationed. In all this work the Advisory Board claimed that they could give at least as good an education as could be got in any of the civilian schools for medical officers of health. They courted the very fullest inquiry from the licensing bodies respecting their teaching, and if any suggestions could be made for improvement they would be thankfully received and acted upon. The whole desire of the Advisory Board was to make the training in sanitary science of the Army Medical Department as good and as efficient as it could possibly be.

Dr. MacAlister moved to amend the proposed addition to Rule 4 as follows: -In the case of a medical officer of the Royal Army Medical Corps, a certificate from the principal medical officer under whom he had served, stating that he has been engaged for a period of at least three months in acquiring a practical knowledge of hospital administration in relation to infectious diseases, may be accepted as evidence under Rule 4."

Dr. Bruce accepted the amendment, which was then agreed to.

Sir John Tuke, M.P., in supporting the recommendations of the Committee, said that circumstances had arisen which he thought would fully justify the alteration of their regulations. No one was more jealous than he of the regulations which had been formulated by the Council, but, in his opinion, the passing of this scheme would be a great boon to the Army. He had very good reason to believe that on certain occasions the absence of an intimate knowledge of the laws of Public Health had been productive of evil in South Africa.

The recommendations were then agreed to *seriatim*, the revised report containing them to come up for approval subsequently.

Attendance at Fever Hospitals.

A communication from the Metropolitan Asylums Board is enclosed in the report suggesting that the Council should reconsider the rule which they had recently made with reference to the attendance of candidates for the diploma in Public Health at the fever hospitals, on the ground of the difficulty which the Committee felt existed at the hospitals of that Board in giving such instruction. The Committee advised that the Board should be informed that the Council adhered to the regulations referred to, and this was agreed to.

It was resolved to send a similar reply to a communication on the same subject received from the Royal Institute of Public Health.

Two applications made by intending candidates, asking for relaxation in their case of the rules and regulations for the diploma of Public Health, were refused.

Preliminary Education.

The report of the Education Committee on the result of the steps taken to raise the standard of certain preliminary examinations was received and adopted. This report bears on the examinations of the College of Preceptors, the Educational Institute of Scotland, and the Royal Colleges of Physicians and Surgeons in Ireland. The Committee are of opinion that the standard of the College of Preceptors has reached that recommended by the Council in 1900 to come into force in January, 1902, but they are unable to give this assurance with regard to the others.

A grant of £25 was made to the Education Committee to assist them in carrying on the work.

Reports from the Examination Committee.

Apothecaries Hall, Ireland, Dublin—The Visitor and Inspector point out that at seven final examinations held under the existing regulations, thirty-two candidates presented themselves and eleven received their diplomas. On the present occasion two candidates entered and both failed. They criticise certain details, but express themselves well satisfied with the arrangements for the examination, which they describe as "sufficient." The Committee nevertheless see nothing in the report to modify the conclusion come to in December last—viz., that the candidates for this examination are men of an inferior class who seem to be incapable of passing a good examination in any important group of subjects, and can only obtain their license of practice by what the Council condemns—viz., the piecemeal method of passing examinations, long spun out. They add that the introduction of such men into the profession is not, from their point of view, to the advantage of the public.

Mr. Tichborne protested against the concluding paragraph in the report, and moved that it be deleted.

Mr. Jackson and Dr. Atthill called attention to the numerous errors of spelling which disfigured the papers, and Mr. G. Brown seconded Mr. Tichborne's amendment on the ground that the blame was hardly fair.

Sir William Thomson suggested that only the concluding part of the paragraph should be omitted, and, no objection being raised, this was agreed to and the modified report was adopted.

The Conjoint Board in Ireland.—The Visitor and Inspector make sundry criticisms and suggestions which, in the opinion of the Committee, "demand serious consideration by the bodies inspected," but the reporters state that on the whole they are of opinion that it is a fair and carefully conducted examination fulfilling the requirements of the Council.

The report was adopted and the Council adjourned.

SEVENTH DAY.—Tuesday, December 2nd.

Sir William Turner, President, in the Chair.

University of Birmingham.

The Committee "were satisfied that the examination was not only sufficient but of a high order," and they even went so far as to congratulate the newly-formed University on the result of its first medical inspection. The report was, of course, agreed to *nem. con.*

Medical Amendment Bill.

The Council then went into committee to further discuss the draft Bill. The next step was to enter upon the minutes the draft Bill as modified by previous discussion and subsequently amended by Mr. Muir Mackenzie, and this was agreed to.

This draft Bill has for object, (1) to reorganise the relation of the Central Council to the Branch Councils, (2) to abolish branch funds in favour of one central fund, (3) to revise the fees payable on registration, (4) to provide for the compulsory registration of medical students, and to levy a fee for so doing, and (5) to place the finances of the Council on a better, or at any rate on another basis.

On the motion to adopt the report, Dr. Finlay moved that the report of the Financial Relations Committee be referred back for further consideration, especially in respect of "economies in expenditure," no suggestion bearing thereon having been made by the Committee.

Dr. Norman Moore seconded, adding that it remained with the Committee to convince the Council that no economies, however slight, could be made. He thought the amendment might assist in placing the finances of the Council on a sound basis.

Sir John Tuke urged that the proper course was for the Council to lay a statement of its financial position before the Privy Council, and from this point of view the introduction of a Bill was premature and even irregular. It was the business of the Council to show that no reduction of expenditure was possible, but he urged there were many ways in which this could be effected; for instance, they had not considered the question of abolishing fees and lengthening the hours of sitting.

Sir Victor Horsley pointed out that this had been considered and it was stated in the report that it was not an economy which could be expected to meet a deficit of £1 500 a year.

Sir John Tuke argued that the Committee ought to have given their reasons. He suggested that they might shorten the procedure in penal cases and they might apply to the Consolidation Fund in the same way as the Incorporated Law Society, &c. He entirely dissented from the Bill, which he believed would be opposed by the public and also by the profession.

Sir Victor Horsley pointed out that the first thing suggested in the report was a memorial to the Privy Council. Economies were considered, but not reported upon because they were considered inadequate. He would gladly support a proposal to apply to the Consolidated Fund, and as to reduction of fees he suggested that members should have the courage of their opinions and vote for it. (Sir John Tuke: I did vote for it.)

The amendment was then put and carried. Dr. Atthill asked that Dr. Finlay's name might be substituted for his on the Committee.

An attempt by Sir William Thomson to instruct the Committee to consider the advisability of limiting the Bill to a single clause (alteration of fees) was disposed of by "the previous question."

Public Health Examination Rules.

The rules for the diploma in public health, as amended on Monday, with reference to Army medical officers, were adopted by the Council.

Report of Pharmacopœia Committee.

Dr. MacAlister, in moving the adoption of the report, referred to the International Conference for the Unification of the Pharmacopœial Formulæ of Potent Drugs and Preparations held at Brussels from September 15th to 20th last, when a number of resolutions were discussed, in which a good deal of give and take was required, but ultimately the decision of the Conference was unanimous. In order to continue and complete the work it was proposed that an international bureau should be established in Brussels for the purpose of affording to the various pharmacopœial authorities opportunities of intercommunication. The Committee believed that such an office would be capable of rendering important international services, and thought it desirable that the Council should in a formal manner support the proposal of the Conference for its establishment. The recommendation that he moved was that "The Committee therefore recommended that the President be requested to inform the Belgian Government, through the proper channels, that the General Medical Council approves the proposal to establish in Brussels an International Bureau of Information on matters relating to pharmacopœial unification, and that it is willing, when desired, to nominate a correspondent representative of the 'British Pharmacopœia.'"

Mr. Tichborne seconded.

Dr. Payne expressed cordial approval of the object of the Conference, and moved a vote of thanks to Dr. MacAlister for the services he had rendered at Brussels. This was agreed to.

The report of the Students' Registration Committee and of the Dental Education and Examination Committee were received and adopted.

Mr. G. Brown then moved a resolution which stood in his name for the appointment of a committee to consider the question of "pupilage," but he admitted that it was so drafted that it could not profitably be discussed, and asked leave to withdraw it, which was promptly accorded.

The English Conjoint Board.

Sir Victor Horsley asked the Council to express the opinion that the Royal Colleges had had time to communicate their observations upon the report of the Visitor and Inspector upon the first examination of the Conjoint Board, and ought to have furnished the Council with their observations thereon. After some discussion this was shelved by "the previous question."

The President was requested to appoint two persons to visit and report upon the examination in chemistry, physics, and biology of the Conjoint Boards in Scotland and Ireland and the Apothecaries Society in London.

Circulation of Council Documents.

Sir Victor Horsley moved that a confidential copy of the reports of the visitors and inspectors should be supplied when ready to members of Council, together with a copy of the remarks thereon by the body visited. This was negatived by a majority of one.

Proposal *in re* Legislation.

Mr. Tomes moved that an endeavour be made to secure the interest of the Government in Bills promoted by the Council, and this was agreed to.

Various items of business were transacted, and after the usual votes of thanks the session came to an en

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Special Articles.

OPENING OF THE NEW MEDICAL INSTITUTE IN BELFAST. (a)

On Wednesday, the 26th ult., the new home of the Ulster Medical Society, described in these columns a few weeks ago, was handed over to the Society by Sir William Whitla, by whom it has been built, furnished, and equipped. The day's proceedings consisted of three functions—the opening of the Institute by the Lord-Lieutenant in the morning; the unveiling of the Smyth memorial window in the afternoon; and the annual dinner of the Society—the first under its own roof—in the evening.

At the morning ceremony the spacious lecture-hall was filled with a representative gathering of medical men from all parts of Ulster. On the arrival of their Excellencies, President Hamilton, of Queen's College, was moved to the chair, and explained briefly the position of the Ulster Medical Society and the Belfast Medical School, and pointed out the great advantages that would accrue to both from Sir William Whitla's gift.

Sir William Whitla, who was very warmly received, handed the title deeds of the Institute to Dr. John Campbell, who succeeds him as President of the Ulster Medical Society. In doing so, he said that he made no conditions or restrictions whatsoever, save that the building be used as an institute or place of meeting for the Society, in which medical men of the city of Belfast and the province of Ulster might from time to time assemble and discuss the many problems which relate to the healing and prevention of diseases, and all matters which pertain to the health of the community in which we lived. "It is," he added, "my sincere hope that under the guidance of Him who went about healing all manner of diseases, and to whose service I humbly in my heart dedicate this building, that the increased facilities which it affords will stimulate original research, and to some extent assist the general advance of our sacred mission for the alleviation of human suffering. I am also hopeful that it will consolidate and strengthen the feeling of brotherhood which has always been a characteristic of our profession in this northern province." The following Fellows of the Ulster Medical Society were named as trustees of his gift by the donor:—Dr. John Campbell, Dr. Nelson, Dr. Dempsey, Professor Lindsay, Dr. McCaw, Dr. Mitchell, and Dr. Cecil Shaw.

Sir William Whitla then handed a massive silver-gilt and enamel key to his Excellency, who, amidst much enthusiasm, declared the Institute open. After expressing his pleasure at being present, the Lord Lieutenant referred to the graceful way in which the gift of the Institute was made, saying that the spirit in which it was given at any rate equalled the generosity of the gift. He concluded by expressing the hope that for many years to come the Institute might be a source of benefit to the medical profession, and that lecture-room might be the scene of great developments in medical science and medical discovery.

A vote of thanks to their Excellencies was moved by Professor Redfern, seconded by Sir Jas. Musgrave, and passed by acclamation.

Dr. John Campbell moved, on behalf of the Ulster Medical Society, that their best thanks be given to Sir William Whitla for his generous gift.

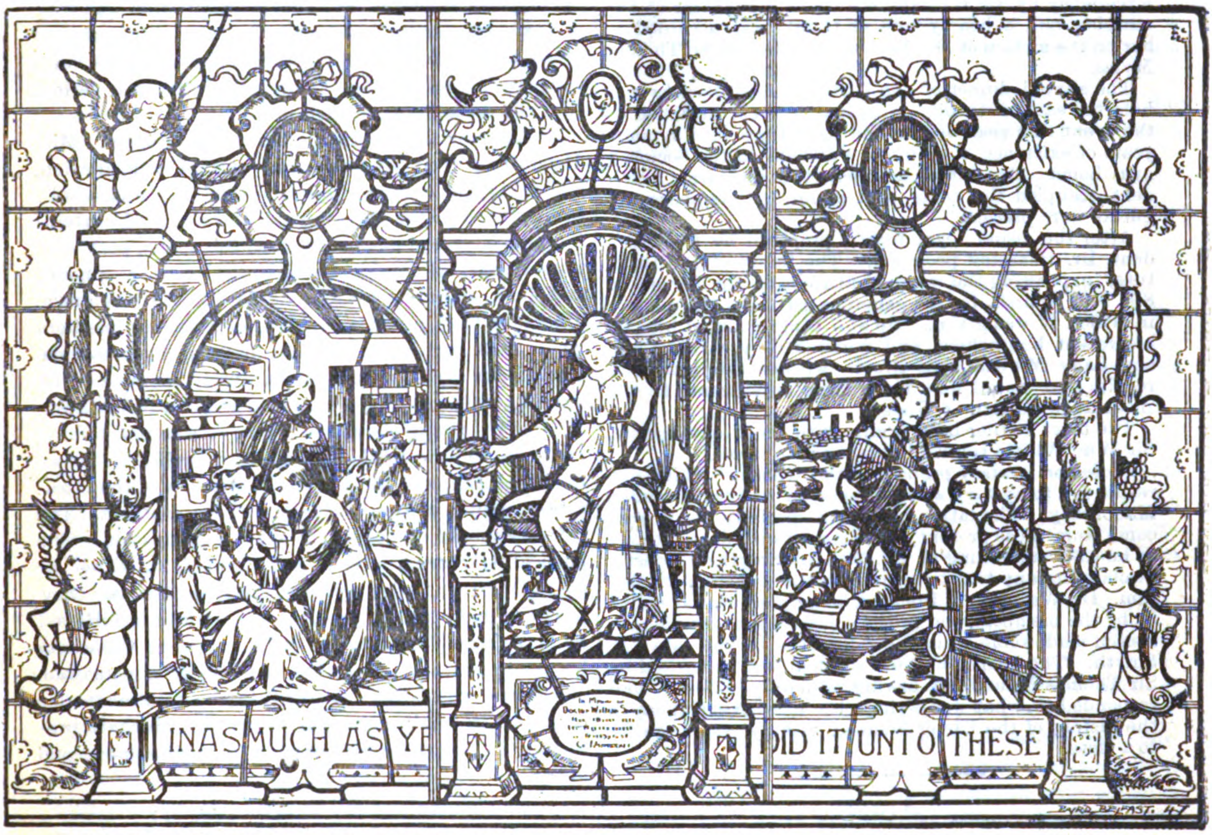
Sir William Quartus Ewart seconded this vote, saying, as a civilian and Belfast citizen, that anyone who conferred a benefit on medical science conferred a benefit on the whole community.

The vote was passed enthusiastically, and Sir William Whitla briefly replied.

At three o'clock on Wednesday afternoon a large gathering, consisting chiefly of the wives of medical men, assembled in the library of the new Medical Institute to witness the unveiling of the memorial window to the late Dr William Smyth by her Excellency the Countess of Dudley.

(a) Special report for The Medical Press and Circular.

The beautiful stained glass window commemorates the tragic and heroic death of Dr. Wm. Smyth, who, as all readers of The Medical Press will remember, died in November, 1901, of typhus contracted while assisting the fever-stricken inhabitants of Arranmore, co. Donegal.



THE SMYTH MEMORIAL WINDOW IN THE NEW MEDICAL INSTITUTE IN BELFAST.

The window is about 6 ft. long and 3 ft. high, and the subjects are arranged in three upright panels held together in a framework of Renaissance architectural ornament executed in quiet tones of white, grey, and yellow. The panel to the left represents the interior of an Arranmore cottage, the sick fisherman reclining in the foreground, with Dr. Smyth kneeling at his side feeling his pulse. Behind are other fisherfolk and a donkey and goat—a characteristic touch.

The panel to the right shows the boat close to the landing place, Dr. Smyth holding a sick girl in his arms and Dr. Brendan McCarthy rowing, while one of the sick men bails the leaky old craft.

The centre panel contains a fine allegorical figure seated in an alcove, holding in one hand the victor's wreath, and in the other the martyr's palm. On cartouches over the side panels are portrait heads of Dr. Smyth and Dr. McCarthy. Under the central panel is a short memorial inscription commemorative of Dr. Smyth's self-sacrificing work, and across the base is inscribed the text, "Inasmuch as ye did it unto these."

On the arrival of her Excellency and suite, Sir William Whitla made a brief explanatory speech, saying that it was not from any personal feeling he had erected this window, as he had never been privileged even to meet Dr. Smyth, nor was it merely to perpetuate his memory, for "while the billows break on Arranmore" that can never die. But his idea had been, when planning this building, to symbolise in art some noble precept or example of our profession, and leave it as a help and encouragement to those coming after. It was placed over the chimney-piece of the library, with the building so planned that it must be always in view, ever preaching the solemn and eloquent though silent, sermon to the Institute, of love to our fellow-men, devotion to duty, and self-sacrifice.

Her Excellency, who was loudly applauded, said: It is only because I feel that it might perhaps seem somewhat disrespectful to the memory of him whom we desire to-day to honour were I to remain silent while I perform my task of unveiling this window, that I shall try to utter a few brief words. At the same time, I experience a profound diffidence in doing so because any words of mine must be altogether inadequate either to express the feeling which is uppermost in all your hearts or to be in any way worthy of the subject on which I desire to speak. The few striking facts connected with the life and death of Dr. William Smyth are well known to all of you—the years during which he treated the sick at Burton Port; the outbreak of typhus on Arranmore, where he nursed the fever-stricken islanders and rowed them in an open boat to the mainland; finally, his death from the infectious fever. The profession to which he belonged is one with which is associated a lengthy chronicle of noble deeds, many of them unostentatiously performed in the ordinary course of duty, often unrecorded and unacquainted with fame. Of this profession he was a worthy representative. He lived an uneventful life in the midst of the fisher folk, to whom he ministered during many years, and in whose service he died. He seemed to have attracted little attention during his life, and was to the end of it wholly unconscious of having performed any unusual act of heroism. He was what might be called an everyday hero. To the people among whom he lived and moved he was a familiar homely figure deeply beloved; but perhaps he did not appear even to them in due perspective. Death has before now made such as he loom larger in the eyes of those who failed before to see their true proportion. But surely it is at the tomb of such men that succeeding generations kindle the touch of heroism, of high ideals, and of devotion to duty. His life teaches many lessons, and his memory distils a pleasant fragrance. Upon it rests for ever the dignity of service and of sacrifice.

After her eloquent and touching speech Lady Dudley unveiled the window, which was well shown by a cluster of electric lights behind it, the room being darkened, and Sir William Whitla read a poem, written for the occasion by Professor Boas, of Queen's College, Belfast.

A silver album, containing a copy of the poem and a monochrome print of the window, was presented to her Excellency by Sir William Whitla as a souvenir of the occasion, and a hearty vote of thanks was accorded to her on the motion of Dr. Nelson, seconded by Sir Thomas Myles.

The annual dinner of the Ulster Medical Society was held the same evening. Unusual interest attached to the event this year, as, for the first time in its many years of existence, the dinner was held in the Society's own home. Dr. John Campbell, the incoming President, occupied the chair, and about 100 members and guests were present.

After the usual loyal toasts, proposed by the President, Dr. Dempsey proposed, "The Donor of the Institute," expressing the warm gratitude of the Society to Sir Wm. Whitla for his generous gift, and the manner in which it was given. He also congratulated him on his recent knighthood, and concluded by wishing him and Lady Whitla long life to witness the beneficial results that would flow from their munificence to the medical profession of Ulster.

The toast having been drunk with great enthusiasm, Sir Wm. Whitla replied in appropriate terms.

Professor Lindsay proposed "the Guests," which was responded to by Sir James Henderson and Dr. Brendan MacCarthy. The latter received a specially warm welcome from those present, who listened with deep interest as he told something of Dr. William Smyths' modesty disclaiming any title to a share in the honour accorded him. Dr. Warnock, of Donegal, being present, was called on by the members, and in the course of a most felicitous speech made some touching references to the late Dr. Smyth. The health of the President was proposed by Sir Thomas Myles, and having been duly honoured and responded to, what was perhaps the most eventful day in the history of the Ulster Medical Society was brought to a close.

France.

[FROM OUR OWN CORRESPONDENT.]

Paris, Dec. 7th, 1902.

Treatment of Arterio-Sclerosis.

Professor Huchard, the highly-esteemed therapeutist, whose treatise on heart disease and affections of the arteries is considered as one of the best of the standard works on the subject, wrote recently on the malady known as arterio-sclerosis, which he said was one of the commonest affections, since it was a malady from which nearly every person suffered sooner or later, being the inevitable consequence of advancing years. Its study was very important, as it was against its progressive invasion and its effects that man had to struggle. The causes of arterio-sclerosis might be divided into two groups, the certain and the doubtful.

The certain causes were: Gout, diabetes, alimentary toxines, plumbism, arthritis, chronic rheumatism, heredity and senility. Doubtful causes: Alcoholism, tobacco poisoning, syphilis and mental overstrain.

The localisation of the malady depended on the cause; gout, arthritis, diabetes, affected the heart, aorta, and renal arteries (very frequent); chronic rheumatism, the arteries in general, but rarely the heart; heredity, endoarteritis; tobacco, probably the coronary artery; alcoholism, hepatic and pulmonary arteritis: plumbism, renal and cardiac arteritis; alimentation, general arterio-sclerosis (very frequent); senility arterial atheroma.

These indications were important, as they rendered possible the diagnosis of the malady at an early stage, when there was some chance of fighting against its baneful effects. Preventive measures consisted in introducing into the economy the least possible quantity of toxic substances and facilitating the elimination of those already formed. The application of those rules comprised nearly all the treatment of the first period, that of arterial hypertension.

Treatment: Hygiene and alimentary regimen. Milk diet should form an important part of alimentation, while certain exciting liquids should be suppressed; tea, coffee, liqueurs of every kind, and also food containing more or less ptomaines, such as fish, game, pork, and tinned meat. All liquids should be moderate in amount and just sufficient for the needs of the organism, otherwise they produce a kind of vascular plethora which was certain to provoke arterial hypertension. That strict *régime* should be absolutely imposed on all patients suffering from a gouty or rheumatic diathesis. While prescribing the above *régime* it was well to have recourse to intestinal antiseptics; naphthol, benzonaphthol, charcoal, but the best antisepsis of the intestine consisted in the evacuation of its contents. The patients should consequently avoid constipation. The medical treatment proper was limited to three or four drugs, but they rendered good service, as they produced more or less rapidly vaso-dilatation, followed by lowering of the arterial tension. Among these may be mentioned nitro-glycerine and iodide of potassium or sodium, the latter constituting the treatment *par excellence* in small continued doses. M. Huchard prescribes the following preparation as antidyspnœic and diuretic:

Tincture of grindelia robusta, ℥j;
Tincture of convallaria majalis, ʒijss;
Tincture of squills, ʒj.

Fifteen drops three times a day in water.

Dyspnœa being one of the essential signs of arterio-sclerosis, especially that to which has been given the name of toxic dyspnœa, of alimentary origin, M. Huchard as soon as he perceives it, institutes the following *régime* during six months or a year.

1. For eight days absolute milk diet, three quarts daily.

2. During the following eight days (and so every month during the whole period) mixed diet; eggs, fruits, grapes, small quantity meal once a day and never in the evening.

3. Suppression of game, cheese, tea, alcohol, tobacco.

4. A slight purgative now and again.

5. During the period of mixed diet two or three wafers of ten grains of theobromine.

6. During the period of purely milk diet iodide of potassium.

7. In case of cardiac insufficiency moderate doses of digitalis.

Incontinence of Urine.

The following will be found an effectual remedy for this distressing complaint:—

Tincture of rhus aromatica ... ... ʒj.

Fifteen drops twice a day for a child ten years old.

Austria.

[FROM OUR OWN CORRESPONDENT.]

Vienna, December 6th, 1902.

Malignant Growths in the Thyroid.

Hirsch, at the "Gesellschaft der Aerzte," related the history of a young man, æt. 19, who was received into Professor Mosetig's ward on September 29th last. His own story was that two years ago he noticed that his neck was getting very small and he had been told that his thyroid gland was disappearing. This had gradually continued till within six days before admission when a rapid enlargement of the neck set in, causing him difficulty in swallowing and breathing. His voice gradually became hoarse, with frequent attacks of pain in the back of the head.

On examination a tumour was found in the neck over the site of the thyroid about the size of a man's fist, with a peculiar consistence of hard and soft prominences, although otherwise it might be described as elastic or pseudo-fluctuant in character.

The laryngoscope revealed a paralysis of the right recurrent laryngeal nerve, with dislocation of the trachea towards the left, giving it a curved shape.

The diagnosis, notwithstanding the complicated symptoms, was given as a sarcoma of the thyroid. The rapid growth and irregular consistence favoured this opinion.

On October 1st, under the influence of Schleich's local anæsthesia, the tumour was extirpated as a radical cure, although the danger from strumoderma was equally great. The tumour was very easily enucleated, except at one point on the right side where it had become attached to the cartilage of the larynx.

The pathological examination of tumour under the microscope proved it to be a carcinomatous adenoma. On October 10th the stitches were removed. On October 14th, *i.e.*, a fortnight after the operation, when the larynx was examined, a small tumour about the size of an apple was observed on the right side. A few days later a similar enlargement occurred on the left side, which was evidently a recurrence of the original.

These two tumours increased in size, rapidly covering the whole of the front and sides of the neck right back to the spine. A few days later tracheotomy had to be performed owing to the occurrence of alarming dyspnœa, but during the operation the trachea could not be found owing to the great shrinkage and displacement behind the tumour, and the patient died forty minutes later from suffocation.

The important points to be noted in this case were (*a*), the occurrence of carcinoma in so young a subject; (*b*), the rapidity of growth, both of the original tumour and of the recurrent growths, notwithstanding the early extirpation of the neoplasm which was supposed to be completely removed; (*c*), the failure to carry through the operation of tracheotomy.

The pathological preparations were examined to discover the cause of failure in operating, and the trachea was found to be greatly contracted and stenosed, while the cartilages were quite soft and flexible. The growth involved the jugular veins and their branches. Metastatic deposits were discovered in the pleura and lungs.

Facial Hemiatrophia and Paraffin.

Schlesinger showed a case of hemiatrophy of the face, which he had treated with subcutaneous injections of paraffin, with the best results.

Dwarf.

Kienböck showed a youth about eighteen years of age, who was 113 centimetres high (34 ins.), whose limbs were in proportion to the height. He presented an infantile appearance, and the mind decidedly pseudo-psychical—no hair about face, axilla, &c.; no cretinism nor inclination to myxœdema; on the contrary, he is fat and well nourished. All the rest of the family are healthy, the thyroid gland being normal in size.

The Röntgen rays showed the skeleton to be in due proportion, though slender, and resembling ossification in the eleventh year.

Kienböck is of opinion that this was a form of semi-cretinism with simple proportions, with stunted growth both corporeal and psychical.

Injurious Effects of Atropin in Ileus.

Atropin, when used for any length of time, has an injurious effect on the nervous system, particularly the vagus and splanchnic nerves, while the muscles of the bowel and the ganglia which serve the peristaltic motion remain almost unaffected in structure by its use. Again, atropin in its action acts most potently on the bowel through inhibitory nerves such as the splanchnic, which may often give rise to more trouble than benefit to the patient as the peristaltic action becomes more vigorous and the patient more sensitive. When small doses of morphia are combined the effect is marvellous in cases of ilius.

The rational application of atropin would be where the ileus itself is paralysed, or almost so, when the action of atropin would be beneficial in relieving the inhibitory apparatus and thus getting rid of much of the paralysis.

The atropin theory for ileus is fallacious and misleading, as it is only in very complex conditions that it can succeed, although its combination with opium or codeia may prove to be of the utmost benefit to the patient, but alone may cloud and confuse the whole symptomatology of the case.

THE CANARIES AND MADEIRA IN WINTER.

[FROM OUR SPECIAL CORRESPONDENT.]

The Voyage.—Liverpool was in a melancholy mood when the ss. "Fantee" sailed for the Canaries last month; King Boreas was, in truth,

"Monarch of all he surveyed;
His right there was none to dispute;
From the centre all round to the sea":

so far, indeed, seemed his territory to extend that the captain thought it prudent to cast anchor in Holyhead Bay and allow his fury to exhaust itself. Sunday, as befitted the day, a comparative restfulness succeeded; rain had ceased to batter the face of the hardened steersman, and we started afresh and landed at Las Palmas on the following Saturday without further hindrance by the elements. After the first two days we left behind us the cold and gloom of November—so unfortunately natural to our northern climate—and as we neared the sunny south, overcoats and wraps of all kinds were dispensed with and one could lounge or pace the deck in ordinary summer attire. Our ship "Fantee," one of the recent additions to the magnificent fleet of the Elder, Dempster line (African Royal Steamship Company), whether viewed in her sea-going qualities, her design for the comfort and health of passengers or the politeness and attention of her officers and staff, left nothing to be desired, while a liberal table with an abundance of fruit at every meal ministered to the necessities of the robust, whose seaboard appetites probably surprised no one more than their owners. To those, however, who are not good sailors it must not be denied that a week's sea passage will always act as a deterrent even with the charming winter climate of the Canaries in prospect; but go where we will out of this sea-girt isle of ours, a shorter or longer voyage has to be got through, and to those who have the courage to face one of this length, no finer health giving tonic can be prescribed, the transient miseries of *mal de mer* are soon forgotten on touching shores bathed in sunshine and alive with novel associations. The ship having for its destination Sierra Leone, Bonny, and other British possessions along the West African Coast carried an unusually interesting living freight; many in the upper ranks of coloured natives were returning from England after completing an English education in preparation for Government posts. Dr. Manley was going on an official mission to Bonny and the Nigerian territory, and several other members of the medical profession were returning to duty or to fresh Government appointments. "Doctors!" exclaimed the steward on inquiry, "well, sir, if all the passengers and ship's crew were taken ill, there would always be plenty of doctors on this line to look after them."

The Canaries.—Having arrived at Las Palmas, the capital of Grand Canary and the port of call for most of the ships to and from the Cape, the West Indies, and West Coast of Africa, the visitor at once becomes impressed with the distinctly Eastern character of his surroundings. Hordes of swarthy men and boys surround the vessel in small craft, offering for sale the fruits, lace, and other goods of the island, tunics of rainbow hues from Morocco and neighbouring coasts, cigars and tobacco at ridiculously low prices. At Las Palmas there are two principal hotels—the Catalina and the Métropôle. Most of those on board went to the latter, it being, like the ship, under the control of Messrs. Elder, Dempster and Co., and a very excellently-managed hotel at moderate charges we found it. Of modern construction, it is well drained, lighted by electricity throughout, and, being built literally on the sea beach, cool sea breezes temper the heat even when the sun is hottest. It may be urged that too much attention should not be paid to one personal experience. I may have been more fortunate than others, but during the fortnight I stayed in the Canaries I saw neither rain nor fog, open sea bathing was indulged in every morning, and this in the latter end of November, with the mean daily average temperature in the shade of 65° F. For the invalid or the overworked City man of whatever profession I can imagine no climate to be more of a paradise; there is no temptation to excitement, but rest absolute and complete under a canopy of ethereal blue, in a temperature which varies probably less than in any other part of the world. The Canaries are, however, distinctly disappointing in scenery, their volcanic origin is apparent everywhere. Yawning craters, acres of lava and inaccessible peaks meet one at every turn, and the roads are abominable. But when one comes across ground under cultivation, as in the Orotava, Monte, and La Palmas districts, orange groves, mangoes, date palms, figs, and bananas grow in luxuriant abundance, and form, as it were, delightful oases amid the desert of igneous rock, seismic cinders and sand. Of the inhabitants little need be said; poverty is everywhere apparent, and the troops of children who greet you at every turn lead one to imagine that the tenets of Malthus have not penetrated herein. They are an industrious, apparently happy and contented race, drunkenness being almost unknown. English physicians are resident both at Teneriffe and Grand Canary, so that practitioners desirous of information before sending patients may be reassured on this point.

To anyone anxious for a mountain climb there is the majestic Peak of Teneriffe, nearly 13,000 feet in altitude, which can be seen towering above the clouds a hundred miles distant, whilst golf links are provided for those in need of this kind of exercise.

Of the cost, I know of no holiday that can be obtained at so great a distance for so little money. The shipping company before mentioned issue special tickets for a month (and it was with one of these I travelled) for £15, which includes passage and board on the steamer both ways, and board and residence at the Hotel Métropôle, Grand Canary, for the intervening fortnight, so that with £5 thrown in for wine, excursions to the islands and incidental expenses, the whole can be accomplished comfortably for £20.

I propose devoting a few lines next week to the Island of Madeira.

The Operating Theatres.

GUY'S HOSPITAL.

Removal of Half the Lower Jaw, the Inside of the Cheek, the Tonsil, part of Soft Palate, and of the Tongue.—Mr. Clement Lucas operated on a man, æt. 51, who had been admitted for a swelling of the cheek on the right side. The patient's family history was good, and he had never suffered from any illness. About eight months ago he got very weak and began to lose his appetite; some lumps appeared under his chin and down the side of his neck; two months later he had severe toothache in his right lower first molar, and then a lump developed in his cheek just opposite the offending tooth; this last was extracted, but the lump remained and had since then been growing, giving little or no pain; the glands in the neck were at times swollen. During the eight months the man had lost about three stones in weight. At the time of the operation there was a swelling in the cheek extending on the outside from the angle of the jaw forwards for about two and a-half inches, and measuring about one inch and a half from above downwards. It was quite hard and fixed, and caused no pain on manipulation. Inside the mouth, as far as it was possible to determine, there was a hard swelling, which extended from the anterior pillar of the fauces forward as far as the canine tooth; the teeth behind the canine had been extracted and the gums appeared to be involved. Glands could also be felt in the neck. The odour from the mouth was very fœtid. A.C.E. and then ether were first administered until the patient was fully anæsthetised, a nasal tube with chloroform being used for the latter part of the operation. A Gower's gag was put in the left side of the mouth and a large hook extractor was employed to retract the cheek on the side of the growth, the extent of which was now evident. It involved the ramus of the lower jaw, having absorbed the bone and gum tissues under the masseter muscle, forming a large excavated ulcer on the inside of the right cheek; backwards it implicated the whole of the tonsil and soft palate to within a quarter of an inch of the uvula; it also extended on to the side of the tongue, forming a deep pocket between that organ and the tonsil in which food had collected and decomposed. Mr. Lucas ran a knife from the angle of the mouth on the outside to the angle of the jaw, cutting through the skin and superficial structures and dividing the facial artery and vein, but not the mucous membrane, so that no blood got into the mouth; he next carried a curved incision from near the symphysis along the body of the jaw and up behind the ramus, and dissected out some glands; on the flap being dissected back, the jaw exposed, and the mucous membrane divided, it was evident that the growth had absorbed the whole of the ramus excepting the two processes. The dissection was then carried up to the level of the zygoma, and the masseter was detached; the coronoid was next exposed, and the temporal muscle detached from it; the condylar process, being above the level of the growth, was snipped through with cutting forceps. The growth having been cleared on its under aspect, the side of the tongue was cut off with scissors and the soft palate divided just on the right of the uvula, and these parts, together with the tonsil and intervening tissues, dissected outwards. Finally, the palatal muscles and the internal pterygoid having been divided, together with the third division of the fifth nerve, the whole mass was removed. The surface of the wound was powdered over with a mixture of tannin and iodoform, and plugged with iodoform gauze; the wound in the cheek was sewn up, a small gauze drain being left in at one angle. Mr. Lucas said that the patient being in a very cachectic condition from advanced malignant growth, the operation was undertaken to get rid of a foul tumour and to prolong life. The character of the growth, however, would have to be determined by microscopical examination. He thought the extensive ulceration involving the cheek, the tonsil, the palate, and the side of the tongue had the appearance of epithelioma, but the history of prolonged toothache and swelling about the jaw rather seemed to indicate a growth commencing in the bone ulcerating internally, and spreading from that point. In whichever direction the growth spread, whether from inside towards the jaw or from the jaw towards the palate it had absorbed the ramus of the jaw, in its course. He pointed out that the man had an advanced calcareous condition of his arteries, and had been for some years subject to angina when walking up hills, which gave great anxiety lest his heart should fail under an anæsthetic. Mr. Lucas therefore had communicated with two of the special anæsthetists of the hospital to administer in this case, but neither was available, so Mr. Gray, the house surgeon, as usual gave the anæsthetic. The patient, Mr. Lucas remarked, bore the operation fairly well, but once or twice his respiration became impeded and his pulse very low. Great care had been taken to allow no blood to pass into the trachea. Mr. Lucas drew attention to the incision from the angle of the mouth to the angle of the jaw, and the curved incision round the margin of the jaw, which enabled him to leave the whole of the skin over the tumour, and also gave a very clear view of the parts that he wished to remove. Besides, when the whole of the extensive growth had been removed and the incisions brought together there was from the outside very little appearance of injury, the face being left intact. The patient recovered well from the immediate effects of the operation.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 10, 1902.

PATHOLOGICAL EVIDENCE AT INQUESTS.

It has long been evident that some modification of the present plan of obtaining pathological evidence at inquests is necessary. But too often the course of justice has been thwarted or deviated by the inadequacy or inaccuracy of the evidence based on the results of a post-mortem examination made by one who has had no special training for the task. It is obvious that pathological investigation requires considerable training and experience; it is a special branch of medical science—as distinctly a speciality as ophthalmic or lunacy work. To entrust this responsible task to any but an expert is to run the risk of vitiating the evidence based on the results obtained. In the country, it is true, it may still be necessary for the Coroner to avail himself of such assistance as may be obtainable, but the time is probably not far distant when every County Council will appoint its own pathologist, one of, whose duties will be to perform or superintend the making of post-mortem examinations for medico-legal purposes. This recognised, it will be usual, in cases of special interest or notoriety, for him to secure the assistance of a skilled pathologist when it falls to his lot to have to make the necessary examination. We have, on more than one occasion, in commenting on the shortcomings of the present system, urged upon the authorities the desirability of entrusting the making of these delicate medico-legal inquiries to medical men whose special training and experience ensure the examination being complete and conclusive. The London County Council, in an unostentatious way, has apparently arrived at a similar conclusion, for a gentleman has recently acquired the right to describe himself as pathologist to that body. Some adverse comment has been excited by this gentleman's appearance on the scene, several of the metropolitan coroners having departed from the usual course of entrusting the post-mortem examination to the practitioner who happened to have been called to the person whose death is the subject of inquiry, and having delegated that function to the gentleman in question. While we willingly acquiesce in the principle involved, this appointment is enveloped in too much obscurity for it to meet with cordial endorsement. The appointment is one of considerable moment, and embodies an innovation of very far-reaching importance. It is odd, therefore, to have it sprung upon us in this almost surreptitious fashion, and the lack of consideration shown for the profession at large in this abrupt departure may conceivably lead to much undesirable friction in the near future. As if to render this inevitable, the services of "the pathologist to the London County Council" have actually been requisitioned for the purpose of pathological examination on persons who have died in two at least of our large general hospitals, where assuredly there is no lack of persons perfectly capable of carrying out the investigation with the necessary skill and ability. There is no question, we imagine, as to the right of the coroner to confide the making of post-mortem examinations to whomsoever he, in the exercise of his discretion, thinks fit, and, in a general way, the practice of employing a person specially qualified for the task will commend itself both to the public and to the profession. To do so in the case of hospital patients, however, appears to be a wanton imputation on the skill or the trustworthiness of the hospital pathologists, and this is certain to be resented. Moreover, such services have to be paid for, and although, somehow, we are ignorant of the details of the arrangement, it may reasonably be assumed that an additional and unnecessary burden will thus be laid on the ratepayer in connection with inquests on hospital patients. The coroners are the paid servants of the London County Council, although they derive their authority from the Crown, and they are doubtless acting on instructions received from headquarters. This may explain how it is that it has not been thought necessary to invite the co-operation of the representative bodies of the profession to assist in drawing up a scheme to carry out the principle involved in this new departure, it being regarded as a purely administrative detail.

PUBLIC WATER SUPPLIES.

The water supply of any community is so closely connected with the public health that the medical profession is concerned with all that tends to raise the cost of that prime necessity of life or to lower its efficiency, either in quantity or in quality. We feel convinced that all the bad points mentioned are comprised in Mr. Long's Bill now before Parliament, and we therefore call the attention of our medical readers in all parts of the Empire to what is now being done in London. What the monopolists are effecting here to-day the monopolists will attempt elsewhere to-morrow, that is to say, in those towns and districts that have not been wise enough to secure a water supply of their own. The Metropolis has been handed over to a number of rival companies that have for many years drawn large profits out of the sale of water to the citizens, and in this way have established an enormous capital value as regards those undertakings. For some time past proposals for the purchase of the properties of the water companies have been laid before Parliament, and in consequence the value of the companies' stock has been inflated to an inordinate extent, always at the cost of the ratepayers. Several Purchase Bills introduced by the present Government have fallen through. They have all been characterised by features more or less antagonistic to the interests of the consumer. The average water company, being in possession of a monopoly, can make its own charge for the commodity it sells, and may or may not, as it thinks fit, give in return good water, sufficient in quantity and pressure, constant in supply, and conveyed in properly-laid and maintained distributing pipes. Failure on their part practically escapes any penalty, as witness the whitewashing of the wealthy corporation that year after year brought endless loss and suffering upon East Londoners by recurring water famines. The only way in which citizens are likely to have a good supply is by having that direct control over machinery which goes, or should go, with ownership. Mr. Long's Bill places the future control of the London supply after purchase in the hands of a huge nominated Board of sixty or seventy members. No body of that unwieldy size could possibly act in a prompt business-like way. The majority of its members will be nominated by the Borough Councils, and although they will almost certainly for the most part know nothing of the complicated water question in the Metropolis, they will be nevertheless entrusted with the bargain to be concluded by the companies. The pith of the matter lies in the absence of direct popular control by election of the managers of Mr. Long's proposed water trust. Why should London be denied privileges that belong to every petty town in the kingdom? In Birmingham the water supply is administered by a small business-like committee of nine members. The water supply is owned by the citizens and the profits are diverted from the pockets of private shareholders to lessen the rates in other directions, and to cheapen the cost of water, while at the same time Birmingham is acquiring an enormously valuable property by the operation of a compulsory sinking fund. Why similar advantages should not be available for the Metropolis is a mystery, the key to which lies hidden in the hearts of his Majesty's governors and their supporters. As a former director of a London water company, Mr. Long, the author of the present preposterous scheme, must be thoroughly acquainted with the wants and the wishes of Londoners upon the whole question. Possibly it is that very knowledge which has convinced him of the hopeless apathy of the average Metropolitan ratepayer when called upon to protect his vital interests. However, there is some prospect that he may summon enough interest at the next Borough Council election to register his views at the poll on the Board Schools and the water supply that in future he will support but not control. So far as the water supply is concerned it should offer matter for deep and earnest meditation to every citizen in the United Kingdom, more especially if his lot be cast in places where the leaven of municipal reform has not yet penetrated.

Notes on Current Topics.

The General Medical Council.

The Council during the session which terminated on Tuesday last disposed of a certain number of questions by postponing them. It is obvious that members are not disposed, without further consideration, to pass anything of the nature of a self-denying ordinance, and they display much greater willingness to discuss means of adding to the income of the Council than of measures whereby economies might be effected. We believe this feeling will be reflected in the profession, that is to say, practitioners as a whole are less concerned to dock members' fees or to cut down expenses than to possess a Council that does its work efficiently. An increase in the fee for registration which is paid once and for all may excite a passing grumble, but it is scarcely likely to arouse opposition, especially as those who will be called upon to pay it are not yet actual members of the profession and have therefore no *locus standi*. It is certainly an excellent thing to clear up the ambiguity which at present qualifies the right of the Council to insist upon the registration of medical students, and it is not unreasonable that a fee should be paid for the privilege of registration, unasked though it be. One plan for diminishing the expenses of the Council, which does not appear to have had even the empty honour of a mention, is a reduction in the number of members by fusion of corporate representation. Perhaps the British Medical Association, or some kindred body, might induce a friendly member of Parliament to introduce an amendment to that effect at the opportune moment, and, even as matters stand, it is open to anyone, when the Privy Council is approached, to make this suggestion as an alternative to the proposals emanating from the Council. No mention is made in the draft Bill of any provision for the simplification of the procedure in penal cases, although this was mentioned as one means whereby an immense saving of time, and therefore money, might be effected. Yet, as the procedure is ordained by statute, it is presumably not open to the Council to modify it without legislative sanction. The most characteristic feature of the discussions on the subjects raised by the draft Bill is the manifest insincerity of many of the speakers. They talk in an airy sort of way of doing this or that, but when it comes to the test of the vote it is by no means sure that even the most ardent advocates of economy would support a motion for reducing expenses with their votes.

Milk Analysis at Somerset House.

The prevention of food adulteration is of such prime importance to the community that it is absolutely essential that official analyses should be scientific in method and as nearly perfect as may be humanly possible. So far as milk is concerned, discontent has long been freely expressed with the methods of analysis followed at Somerset House, the Court of Appeal, so to speak, of milk prosecutions all over the country. It becomes a somewhat serious matter, therefore, when public analysts come forward and denounce the methods in vogue at Somerset House as antiquated and untrustworthy. Mr. Cassal, the well-known analyst, agrees with other authorities in this condemnation. The chief grounds appear to be, first, that a specimen sent to Somerset House may not be examined for a month or six weeks after being taken from the vendor. Obviously, decomposition and evaporation may by that time have so seriously changed the original composition of the milk as to render its nature a matter of guesswork. Somerset House, indeed, arrives at its verdict by allowances for disturbance by decomposition and other agencies. The science of analytical chemistry, however, is exact, and the results of half-a-dozen separate analyses of a given sample of milk should not vary more than by a fractional margin of difference. As things go, however, Somerset House often contradicts public analysts, who, for all that, are more likely to be right, inasmuch as they are ready to state their methods, and they are many in number. Meanwhile the public suffers and fraudulent milksellers flourish. It is to be hoped that some member of Parliament will take up the matter.

The Treatment of Dysmenorrhœa.

Dysmenorrhœa is such a protean affection that it seems to defy classification, and its treatment is consequently vague and uncertain. Its relationship to uterine disease and displacement is the subject of perennial discussion, and it cannot be said to have any pathology of its own. Roughly speaking, cases of dysmenorrhœa may be divided into two classes—the cases in which the pain, once established, is constant, and those in which it is spasmodic or intermittent. Constant pain is believed by some to be indicative of ovarian origin, while the intermittent form is associated with functional distress of the uterus. In the latter form the onset of the pain coincides with the onset of menstruation, and in these cases dilatation of the cervix is often followed by marked relief. The objection to dilatation of the cervix is that the relief which it affords is almost of necessity ephemeral, and in order to render it permanent certain gynæcologists advocate division of the circular muscular fibres of the cervix. It is to be feared, however, that this operation, though it may relieve the dysmenorrhœa, exposes the patient to the usual consequences of laceration of the cervix—consequences which the operation of trachelorhaphy was specially designed to obviate. Restricting the purpose of our remarks to the treatment of dysmenorrhœa of uterine origin, in which the pain comes on with the flow; is more or less intermittent in character and is not relieved by lying down; dilatation of the cervix will afford relief in a considerable proportion. Dilatation does not correspond to any particular size of sound; the essential thing is to introduce larger sizes until resistance has been overcome.

The Disposal of the Dead.

The aggregation of mankind in towns and cities has made the problem of the disposal of the dead one of pressing importance to the living. Undoubtedly cremation affords the safest and most rational means, and slowly but surely prejudices are being overcome. As evidence, we have the opening recently, by Sir Henry Thompson, the apostle of fire as he has very aptly been termed, of a new crematorium at Golder's Green, overlooking the Finchley Road, and in curious juxtaposition to the Jewish cemetery. The method of disposing of the dead by cremation is hygienic, simple, expeditious, reverential, economical, and free from painful incidents. The practice of cremation is undoubtedly advancing. Crematoria have been built at Manchester, Liverpool, Glasgow, Hull, Darlington, Birmingham, and one is now being erected at Leicester. There were 445 cremations in this country last year. But America, of course, is in advance of us, for the United States possess 25 crematoria, where last year 3,613 human bodies were reduced to ashes. Germany has seven crematoria, Italy 22, Switzerland three, and Sweden and Denmark one each. It should be remembered that the Act enabling public authorities to erect crematoria will come into force on April 1st, 1903, and a Home Office Committee is now considering the framing of definite rules whereby all fear of cremation being used to conceal crime may be absolutely avoided.

Bacteriæmia.

An interesting series of bacteriological experiments on the blood of typhoid fever patients has just been concluded at Munich by Schottmüller. He finds that the bacilli of typhoid fever may be cultivated from the blood of the patient in 75 per cent. of the cases, and that the earlier in the disease the examination is made the greater their frequency. He has cultivated the bacilli from the blood as early as the second day of the fever. From experiments on almost 200 cases he found that the bacilli were proportionate to the amount of the fever. When the temperature was at its highest the bacilli were both numerous and active, and on the subsidence of the pyrexia they were no longer to be detected. His technique is different from that formerly employed, in that he draws the blood directly from the patient's vein, and in much larger quantities than formerly, which he catches in melted agar at a temperature of 115° F., which is then poured into plates When it is considered desirable to produce colonies of bacteria, he further dilutes the blood in the proportion of one in three. These experiments, which are numerous and carefully conducted, revolutionise our theories of typhoid fever and place in our hands not alone a diagnostic sign so characteristic of the disease as to eliminate doubt, but it likewise gives us a prognostic sign of the greatest value. That typhoid fever might run its course without producing any intestinal lesion has often been demonstrated, but until Schottmüller's experiments made clear that the disease is a bacteriæmia there was no intelligible explanation of the fact; neither could it be understood why the intestinal lesions were not proportionate to the clinical features of the case. The bacilli probably enter the blood both by the alimentary canal and by the respiratory tract, the familiar intestinal lesions being of hæmatogenous origin. If this theory of typhoid fever is accepted, more reliance will be placed on the antipyrexial properties of water, as a bath and as a local application by sponging, and less on intestinal antiseptics. The theory further holds out the hope that the preparation of a preventive anti-typhoid serum is only a matter of time.

The Legislative Repression of Leprosy.

In a recent number of the *Polyclinic* the view that leprosy can be suppressed by legislative enactment is eloquently combatted. The author, Mr. Jonathan Hutchinson, bases his argument on the fact that although leprosy has disappeared from many countries in which it was formerly endemic, the improvement was not the result of repressive measures, but of gradually altered conditions of life. The Norwegian peasants, who in their native land still suffer from the disease, cease to be amenable thereto when they emigrate, and the prevalence of the disease at home is steadily decreasing owing to the better nutrition of the inhabitants since Norway has become the annual resort of multitudes of tourists whose money enables them to improve their dietary. It is possible also that the objection which tourists manifest to fish not quite fresh may in the long run have excited a feeling of distrust among them in regard to this national delicacy. In view of the hardship and misery of compulsory segregation, resort to this drastic measure can only be justified by unquestionable evidence of its efficacy, and of its being the only alternative. Mr. Hutchison denies that it is the cause of the improvement, even when this has coincided with segregation, and he is firmly convinced that there are other and better means of checking the spread of the disease.

Board of Trade Testing for Colour-Blindness.

It is curious to learn at the present day, when the importance of detecting the existence of colour-blindness in those engaged in certain trades is so thoroughly appreciated that, in the opinion of some capable authorities on the subject, the methods of doing so adopted by the Board of Trade are not in all cases either correct or sufficient. At a recent meeting of the Ophthalmological Society, Dr. F. W. Eldridge-Green, in the course of a paper on the necessity for the use of colour names in a test for colour-blindness, stated that over 38 per cent. in one year and 42 per cent. in another year of the rejected candidates at a Board of Trade examination had been found to be wrongly rejected and to be normally sighted. Another statement made at the same time is of more practical importance. A wrongly-rejected candidate is an instance of the unmerited bad luck of a single individual, but a wrongly-passed candidate is a danger to the community, and apparently many candidates are so passed. Dr. Eldridge-Green divides colour-blindness into two distinct classes. In the first class he includes individuals who cannot see certain rays at one or other end of the spectrum, and who have in consequence a shortened spectrum—a class which has its analogue amongst aurally defective individuals in those who cannot hear very high or very low notes. The second class of the visually defective includes those who make mistakes, not because they cannot perceive a colour, but because they cannot recognise the differences between colours as normally sighted people are able to do; a failing which is an analogue to what is usually known as a "defective ear" in the case of those who are aurally affected. The practical importance of eliminating both these varieties of colour-blindness is obviously very great, and yet we learn that the Board of Trade tests make no provision for detecting the first class of cases. The serious nature of this is readily shown by the example brought forward by one of the speakers at the meeting of the Society. An engine-driver, who falls into the first class in consequence of a shortening of the red end of the spectrum, will declare that he sees no light in the case of a distant red light, although he may have been able to pick out successfully all the green wools in the classification test. If such a state of things exist—as from the report of the Ophthalmological Society we must believe it does—the danger to the travelling public both at sea and on land is very great, and the necessity for a revision of the stock tests of the Board of Trade is very obvious. An engine-driver or a sailor, when he sees a light, has to be able to quickly allocate it to one of three groups. To do so he has to ask himself whether the light he sees is white, green, or red, and this question once answered there is no necessity for particularising its exact shade. It seems to be radically wrong that at the present time tests should be applied to determine whether such a man can distinguish orange from yellow, or blue-green from yellow-green—matters with which, so far as his trade is concerned, he has nothing to do, and that at the same time no test should be applied to determine whether he possesses the power of seeing the full range of the spectrum. If a man is blind to white light, he comes into the category of the totally blind, and if a sailor or an engine-driver is blind to red light, he should, so far as his trade is concerned be placed in the same category.

Adrenalin.

This product, embodying the active principles of the suprarenal glands, was first obtained by Dr. Takamine, a Japanese chemist, two or three years ago, and a considerable body of evidence has since been published, establishing its value as a therapeutical agent. Its remarkable hæmostatic properties and its not less well-marked influence on cardiac innervation combine to render adrenalin an extremely interesting and potentially useful substance. According to a paragraph which went the round of the lay press, a few days since, Professor Poehl, of St. Petersburg, of "spermine" fame, has rediscovered this substance, but his claim to originality has since been repudiated by the St. Petersburg Pharmaceutical Association. The plan of "booming" a medicinal substance on the morrow of its introduction, before there can possibly have been time to investigate its therapeutic capabilities, is one to be unreservedly condemned, but in this particular instance the harm is not great, seeing that adrenalin dates back some years, and has already been carefully investigated by numerous observers in all parts of the world.

The Dangers of Drinking-Cups.

The Board of Education in Chicago has announced its intention of abolishing the use of drinking-cups in the public schools. This is a reform the necessity for which must have struck every intelligent person who has given the subject a thought. Anything more insanitary than the customary iron mug or similar vessel which is usually appended to a public drinking-fountain cannot well be imagined. A thirsty man suffering from a communicable disease of the lips uses the cup, and the next person wanting a drink sees the cup provided for him, and, without thinking of the consequences, drinks therefrom. Not only is the infection which has been left by a previous drinker still remaining on the cup, but, as if to avoid any chance of escape the edges of the latter are roughened from rust and bad usage, and so cause the necessary abrasions into which the poison is to be inoculated. Drinking-fountains are a necessity, but adjunctory cups are not. It ought to be an easy matter to so adjust the stream that, without any projecting nozzle to which the mouth could be applied, a gentle flow would be furnished which could be caught directly in the mouth, or, failing that, in the hands. Better to contaminate the water with one's own hands, however dirty, than to convey the dirt and possible infection of another person to the mouth. In these countries we are so radically opposed to doing for people what they ought to be able to do for themselves, that it may not strike the authorities that it is necessary to guard the public in the manner specified. The authorities say, and say truly, that there is no necessity for an intelligent person to use a drinking-cup if he does not consider it to be safe to do so. This is quite true, but still, even if the principle is applicable to adults, it does not apply to children, who are, perhaps, the most frequent users of drinking-fountains.

A New Test for Bile Pigments.

THE identification of bile pigments in the urine is a clinical detail of considerable importance. The reaction usually employed, that introduced by Gmelin, is open to the objection that on the addition of the acid to albuminous urine the precipitate of albumen obscures the play of colours. Moreover, should the urine under examination contain indican the resulting blue coloration, in association with the yellow tint of the urine, gives a green tinge calculated to mislead. Heller's reaction, on the other hand, is not very well marked, and entails the use of chloroform, which complicates the procedure. Dr. Baudouin, of Tours, has introduced a reaction which, from the point of view of simplicity and precision, appears to possess certain advantages over those in common use. He employs a solution of fuchsine (one-half per cent.). If two or three drops of the fuchsine solution be introduced into urine containing bile it immediately develops a fine orange tint, in marked contrast with the violet-red of the test solution. No other colouring matter of urine provokes this reaction, which is determined by very minute proportions of bile pigment.

Cancer in Scotland.

A VALUABLE contribution to the study of cancer has been recently made by Dr. W. G. Aitchison Robertson in the shape of a paper read before the Royal Society of Edinburgh. The writer has examined systematically the facts connected with deaths from cancer in Scotland over a certain period. His statistics tend to show that there has been of late years an increase in the disease, which causes no less than 7 per cent. of the total mortality in women over forty-five years of age. The mean average for the whole of Scotland from this cause is 4·13 per cent. Excluding the deaths of strangers, the apparently high mortality in Edinburgh, 5·15 per cent., was practically reduced to the normal. It is a curious fact that the towns display a relative healthiness as regards cancer when compared with country districts. A rigorous correction, moreover, raised most country districts to the normal, and in many cases to a point considerably above it. In Kincardineshire and Sutherlandshire the figures were brought from 4·02 to a good deal over the normal, while Haddingtonshire was raised from 4·25 to 5·59 per cent., and Peeblesshire from 4·68 to 5·07. The record for excessive cancer mortality came from Nairnshire, which, in its uncorrected state, stood at 8·77, but was afterwards increased by correction to 9·73. These facts present the local distribution of cancer in a striking and suggestive manner, and can hardly fail, sooner or later, to advance our knowledge of this mysterious scourge, which has hitherto baffled the curiosity of a host of scientific investigators. Turning to the practical deductions to be drawn from his painstaking analysis, Dr. Robertson is fain to be content with the statement of a series of negative conclusions. He was unable, for instance, to trace any relation between geological formations or dampness of soil and the cancer mortality of Scotland. He was also unable to find any evidence pointing to the rainfall in the various counties as contributing to the results, but stated that much more detailed local information was needed on that point. Neither could he find any connection between the amount and the character of food in any locality and the incidence of the disease. Dr. Robertson urged the importance of a combined investigation by medical men throughout Scotland, an excellent suggestion that, if carried out, would be of the utmost value in sifting and collating evidence with regard to one of the most obscure and deadly pathological conditions that afflict the community.

Well-to-do Hospital Patients.

THE abuse of the medical charities is a subject apparently of evergreen interest to all classes of journalism. This universality may be partly accounted for by the fact that in London alone something like three-fourths of the population receive hospital relief in the course of the year. The welfare or otherwise of the charitable institutions, therefore, claims the earnest attention of three out of four newspaper readers, who will naturally be pleased to hear of the legacies of benefactions and awards bestowed upon the particular hospitals that have secured their personal patronage. Neither hospital committees nor distributing funds give a moment's thought to the injury done to the medical profession, whose patients they are diverting wholesale by placing relief hospitals at the disposal of the well-to-do. To such an extent has the popular conscience become blunted that a few months ago a London newspaper published a prolonged correspondence arising from the expressed admiration of a contributor for the courage of a young lady with £300 a year, who, in spite of that income, did not hesitate to enter as a patient in the wards of a hospital. In hospitals like the London and Guy's, where money payments are taken from the very poor, the latter are thus actually contributing to the support in illness of persons who are well able to pay for medical care and attention. Supposing the lady above-mentioned went to a hospital where they were not above collecting the pence of poor patients, then she would be paid for in part by money squeezed out of the pockets of the labouring and indigent classes. From this point of view the ardour of the young lady's admirer might be somewhat cooled. Meanness is not prudence any more than bravado is independence.

Bullet Extractions and Nitrous Oxide.

The greater accuracy of modern surgery and surgical methods has done much to determine the localisation of bullets buried deep in the tissues of the body. The old porcelain-tipped probe of Nélaton, for instance, has been replaced by the electrical contact probe with electrophonic attachment. The actual extraction of bullets, however, stands very much as it did fifty years ago. The recent death of Mr. James Coxeter, at the age of ninety, recalls the famous instrument invented by him for the purpose, and largely used in the Crimean War. In the French War of 1870 nitrous oxide gas was largely used by army surgeons for the extraction of bullets and in other minor surgery. The introduction for that purpose was chiefly owing to the influenceof Dr. Evans, oculist at that time to the French Empress. Many of the cylinders thus used were obtained from Mr. Coxeter, who, in the year 1869, together with his son Samuel, founded the English industry of storing nitrous oxide gas in steel cylinders. The importance of that particular branch of business, as all the world knows, has increased to an enormous extent since its first introduction. The firm of Coxeter and Sons is one of the household names of the medical profession, with which it has been so long and honourably connected as the skilful inventors and manufacturers of instruments.

A Sanitary Crusader in the Pulpit.

During the present generation the gospel of sanitation has found considerable favour among members of the Church militant. The excellent work done in that direction by the Church of England has long been leavening the country, and the same may be said to a greater or lesser extent of almost all religious sects in the United Kingdom. Perhaps the most energetic protest ever made by a minister of the gospel in his official capacity was by the Rev. D. E. Jenkins, pastor of the English Presbyterian Church in the Welsh town which has earned the title of "Dirty Denbigh." Wearied out by the negligence and apathy of the Town Council on such elementary matters as the town sewerage, the reverend gentleman proceeded to rouse his fellow-citizens in the following pointed and dramatic manner:—He announced that on a certain Sunday he would hold a memorial service over thirteen children who had died of diphtheria in the town during the preceding nine months. In his subsequent sermon he attributed those deaths and the prevalence of diphtheria and of other zymotic diseases to the neglect of the Town Council, upon whom he bestowed a scathing denunciation. The course adopted by this practical reformer is worthy of all commendation. Religious teachers are far too apt to imagine that their duty begins and ends with the spiritual side of man's life, to the exclusion of his bodily welfare. It is to be hoped that Denbigh will lose much of its "dirtiness" under the purifying influence of this courageous minister's attack.

"Christian" Names.

One of the odd points discussed by the General Medical Council was the use of the term "Christian" names. Objection was taken to it on the ground that Jews, Indians, and others could not, properly speaking, be said to have any Christian names at all. Indeed, the description, strictly construed, would only apply to names conferred in baptism. Names such as John, James, Moses, Jacob, &c., might, however, be held to be Christian names, since they are drawn from Scripture, but then they are not likely to be affected by Hindoos, for instance. To provide an alternative description did not prove as easy as one might at first sight suppose, but after dismissing a long list of proposed substitutes the Council decided to ask for "names in full," which affords a very acceptable solution of the difficulty, if difficulty it be.

The Metropolitan Fire Brigade Service.

The efficiency and progressiveness of the Metropolitan Fire Brigade is a matter of first importance, inasmuch as it furnishes, or should furnish, an ideal standard for the guidance of the rest of the Kingdom. It is interesting, therefore, to learn that the London County Council is showing considerable activity in re-organising the local fire service of London. It is to be noted with satisfaction that since the Queen Victoria Street fire, last summer, a number of seventy-feet ladders have been added to the resources of the Brigade. At the same time it is to be regretted that an unjust attack upon Captain Wells by the Yellow Press should have resulted, to some extent, in the substitution of controversy for impartial investigation and reform. The London County Council, in its desire to shield Captain Wells, has published a report wherein the fire service of the Metropolis is made to figure as an ideal of perfection. The plain facts of the case, however, show that in broad daylight a number of persons were burnt to death in the heart of London simply because the firemen had not a ladder long enough to reach the top floor of an ordinary warehouse. Indeed, the County Council has since admitted the defects of its equipment by distributing long ladders in all directions, and by substituting new and up-to-date appliances and methods for former antiquated ways and means Watling Street station, which showed to so little advantage in the fatal fire, however, remains practically untouched. If the obstacle be the cost of a new site, the feasibility of covering in a portion of an adjacent railway cutting, as suggested some time ago by a medical correspondent, may be worthy the attention of the Council. We venture to suggest that the confidence of the public would have been more readily secured by an admission of error and a promise of amendment on the part of the Council.

Dr. A. E. Wright is about to resign his appointment as Professor of Pathology at the Army Medical School, and has accepted the post of Pathologist and Bacteriologist to St. Mary's Hospital.

It is now an open secret that the "Nobel Prize" in Medicine for the present year will be awarded to Major Ronald Ross, of the Liverpool School of Tropical Medicine. The value of this prize is about £8,000.

Major F. Heuston, R.A.M.C., C.M.G., Royal Hospital, Dublin, has intimated his intention of offering himself as candidate for the position of Vice-President of the Royal College of Surgeons in Ireland at the election to be held in June, 1903.

Dr. Andrew Balfour, of Edinburgh, goes out to the Soudan on Thursday to take control of the new chemical and bacteriological laboratories at Khartoum, which have been presented to the Government by Mr. Hy. S. Wellcome.

Literature.

MORRIS'S TREATISE ON HUMAN ANATOMY. (a)

This portly royal octavo of 1,328 pages presents a good account of our knowledge of the anatomy of the human body. The text is subdivided into eleven sections, and has been completely revised and, in great measure, re-written. There are but two of the eleven sections left as they stood in the second edition. These are Mr. Gunn's account of the anatomy of the eye, and Mr. Walsham's of the circulatory system—"Arteries, Veins, and Lymphatics." All the others have been corrected, expanded, and more fully illustrated. The number of illustrations has been increased by fifty-six, and some of the former ones have been further elucidated by the addition of colours. Much praise is due to the author and editor, for the care with which the various sections have been compared with one another by their respective writers. This is very necessary in case of a joint production like the present, where its omission would pretty surely lead to ugly discrepancies. A description of the "Skin" has been added by Mr. Anderson, and a very interesting and instructive account of "Vestigial and Abnormal Structures" has been contributed by Dr. Robinson. We consider the volume now before us to be probably the most trustworthy guide in the English language to the macroscopic anatomy of the human body.

L'ABBE ON THE BLOOD. (b)

This neatly got-up and clearly-printed booklet gives the reader an excellent summary of the present state of our knowledge of the composition, physical properties, and physiological functions of the "vital fluid." It is almost needless to tell those of our readers who are familiar with high-class French scientific literature, that its contents are placed before the discriminating inquirer in the characteristic style and diction of crystalline clearness which forms so distinguishing a feature of the productions of the "masters of science" of that gifted nation. The chapter on "Rupture de l'équilibre physiologique du sang dans les maladies" is most instructive—and suggestive. The amount of varied information contained in this small volume is far too great to make detailed criticism possible within the limits of a review. Besides, it is unnecessary. So we merely feel called on to recommend our readers to make themselves acquainted with its contents. The volume does the greatest credit to the powers and attainments of the author, as well as to the "elective affinity" of the eminent firm of publishers by whom it has been issued.

SCHAFER'S PRACTICAL PHYSIOLOGY. (a)

This little volume contains detailed directions for carrying out experiments in practical physiology such as are likely to be required by the medical student. The directions in question comprise only such elementary exercises as admit of being worked out by a large class. The work differs in this respect from most guides to practical physiology which are generally much more elaborate, and deal with problems which the average medical student cannot be expected to work out for himself. Diagrams of apparatus and reactions are given wherever necessary, and blank pages are supplied on which the student can record such additions or modifications as he may deem desirable. The name of the author is a sufficient guarantee of the quality of the teaching.

AN ATLAS OF ILLUSTRATIONS (b).

The volume before us consists of the first two fasciculi of a new Atlas of Illustrations in Clinical Medicine, Surgery, and Pathology, which is in process of being complied for the New Sydenham Society in continuation of the Atlas of Pathology. The present volume deals exhaustively with the subject of frambœsial syphilis, and consequently, though of the greatest interest and value to medical men who practise in the tropics, and to others who are specially interested in skin diseases, it does not possess quite the same attraction for the general practitioner that some of the later volumes of the series will present.

Fasciculus No. 1 contains a synopsis of our present knowledge of frambœsial syphilis by that well-known authority, Mr. Jonathan Hutchinson, and is illustrated by many beautiful photographic plates. Fasciculus No. 2 consists of illustrations of the disease in Ceylon, which are included under the term "parangi," with descriptive remarks by Sir W. Kynsey, C.M.G., F.R.C.P.I., whose official duties as Principal Chief Medical Officer and Inspector-General of Hospitals, Ceylon, has given him ample opportunities of studying the course of these maladies. The feature of the fasciculus is the beauty and excellence of the illustrations, which have been prepared from original water-colour drawings made by a native artist. The fasciculus as a whole is quite equal to anything of the kind the Society has ever published, and will, for a long time, hold the first place in the illustrated literature of the subject.

We congratulate the Society on the excellence of the first volume of the new series, and predict a most successful outcome for its new venture.

(a) "A Treatise on Human Anatomy, by Various Authors." Edited by Henry Morris, M.A. and M.B. Lond., Senior Surgeon to the Middlesex Hospital, &c. Third Edition, Revised and Enlarged. Illustrated by 846 woodcuts (of which 266 are in colours). London: J. and A. Churchill. 1902.

(b) "Le Sang (Physiologie Générale)." Par Marcel Labbé, Médecin des Hopitaux de Paris· Paris: J. B. Baillière et Fils. 1902.

(a) "Directions for Class Work in Practical Physiology." By E. A. Schafer, LL.D., F.R.S., Professor of Physiology in the University of Edinburgh, &c. Price 3s. net. London: Longmans, Green and Co.

(b) An Atlas of Illustrations of Clinical Medicine, Surgery, and Pathology. Compiled for the New Sydenham Society. (A Continuation of the "Atlas of Pathology.") Fasciculus XIV. (Double Number). Fasciculi I. and II. of New Series. Frambœsial Syphilis (Yaws and Parangi). With Descriptions by Jonathan Hutchinson, F.R.C.S., F.R.S., LL.D., and Sir William Kynsey, C.M.G., F.R.C.P.I. Plates A to H and LXXV.—XCI. Price to Non-members, £1 1s. London: The New Sydenham Society (agent, H. K. Lewis).

HYGIENE AND PUBLIC HEALTH. (a)

WE are not surprised to find a second edition of this book called for within a year of its publication. Based on Mr. Parkes' well-known handbook, the scope of which has been considerably enlarged and made more useful under the joint authorship, the present work should be found as acceptable to all students of hygiene as its progenitor. In view of the enormous increase in the subject matter to be dealt with in a modern treatise on hygiene, the authors have been well advised to omit, so far as possible, reference to analytical methods, which cannot be adequately discussed in a work of this size, and which, being of a practical nature, can be more efficiently acquired in the laboratory. While we have little fault to find with the majority of its pages, those chapters which deal with "Food" and "The Contagia" respectively, are, in our opinion, the most instructive.

A few statements are to be found here and there in the volume with which we cannot quite acquiesce. For example on page 232 the authors recommend the overhead extraction of the heavy dust associated with the metallic workers and grinders' trades. This is scientifically incorrect and against the usual practice, which, indeed, the authors themselves describe further on (page 291). Again, under the heading of "Compressed Air Illness," we read, "The rate of decompression certainly not to *exceed* one minute to every three pounds of pressure." We would substitute for "exceed" the words "be less than," and in doing so we believe our opinion is not contrary to that of those in a position to speak with authority on the subject. Whatever differences of opinion may exist as to the advantages of a prolonged "locking-out" process, no expert on the subject has, with the solitary exception of Foley, ever attributed any bad effects to it. Neither can we agree with the authors, in view of the existing laws, in fixing the marriageable age as "over fifteen years," nor in calculating marriage rates from such a datum.

These minor faults, however, do not detract from the general merit of the book, which is a genuine, and on the whole successful attempt to accomplish the increasingly difficult task of presenting to the student in a concise and readable form those numerous sciences comprised under the head of hygiene and public health.

OBITUARY.

DR. A. M. ALCOCK.

WE regret to announce the death of Dr. A. M. Alcock, medical officer of Innishannon dispensary district, which took place at his residence on the 27th ult. He was the son of the Rev. Edward Alcock, of Kilmeen Rectory. He became a licentiate of the Royal Colleges of Physicians and Surgeons in Ireland, and soon afterwards was elected medical officer of the Innishannon dispensary district, where he laboured for five-and-thirty years, winning the respect and confidence of his many patients, poor and rich, by his skill and courtesy; and their love by his unremitting attention to them in their sickness. Thus in harness and at a comparatively early age he died. A quiet, unobtrusive Christian physician.

Medical News.

Medical Sickness and Accident Society.

The usual monthly meeting of the executive Committee of the Medical Sickness, Annuity and Life Assurance Society was held on the 28th ult., at 429, Strand, London, W.C. There were present Dr. de Havilland Hall, in the chair, Dr. J. B. Ball, Dr. J. Pickett, Mr. J. Brindley James, Dr. M. Greenwood, Mr. F. S. Edwards, Dr. F. J. Allan, Dr. A. J. Rice-Oxley, Dr. F. S. Palmer, Mr. H. P. Symonds, Mr. Edward Bartlett, and Dr. Alfred Gubb. The committee were engaged in examining a large number both of current sickness claims and of proposals for membership. The claims show signs of slackening, and it is hoped that the total experience of 1902 will be found much more favourable than the accounts of the early months of the year led us to expect. On the other hand, the new business experience has been satisfactory all through the year, and notwithstanding that the committee have always declined to spend any part of the contributions of the members in paying commissions or for advertisements, the number of new entrants is steadily increasing. Prospectuses and all other particulars on application to Mr. F. Addiscott, Secretary, Medical Sickness and Accident Society, 33, Chancery Lane, London, W.C.

The International Congress at Madrid.

WE are requested by the National Committee for Great Britain and Ireland to announce that the South-Eastern and Chatham Railway have made the following arrangements for the issue of reduced fare tickets to members attending the Congress at Madrid next year:—1. Members can apply to Messrs. Cook and Son, Ludgate Circus, E.C. (sending them letter card of membership), and they will make all the necessary arrangements through to Madrid. 2. Members can act independently, and must in the first place send their card of membership to Mr. Sartiaux, Ingénieur en Chef de l'Exploitation, Chemins de Fer du Nord, Paris, for endorsement. On the return of the card they can obtain at Victoria or Charing Cross Station, on presentation of the card of membership, a ticket to Paris at a reduced fare. Members who obtain tickets in this way must then re-book in Paris at the Orleans Station, and again present the card of membership so as to obtain the reduction of 50s. These arrangements will be in force on April 1st, and the tickets will be available until May 15th.

Assault on a Medical Man.

DR. FREDERICK JOHN HICKS, of Buckingham Gate, S.W., was the victim last week of a brutal assault at the hands of an irascible army officer who had taken offence at seeing his wife's photograph in Dr. Hicks's consulting-room. The magistrate, who declined to see anything objectionable in the photograph incident, characterised the assault as "most outrageous," and sentenced the offender to a month's imprisonment.

A Medical Student Thief.

HENRY THOMAS, age 22, a student at the London Hospital Medical School, was sentenced to nine months' imprisonment last week at the County of London Sessions for the theft of an overcoat belonging to a fellow student. No reason for the larceny was suggested, and the matter appears to be one in which an expert opinion on the mental condition of the accused might well have been taken.

Unqualified Dentist Fined.

AN unqualified dentist of Ashton-on-Mersey was fined £10 last week for describing himself as a "specialist on the teeth." His speciality was the painless extraction of teeth without an anæsthetic by the hypodermic injection of pure water.

Deaths under Chloroform.

A YOUNG lady at Harrogate died under chloroform administered for the purpose of an examination last week. Only two drachms of the drug, it is stated, had been administered. The usual verdict was returned. Another death under an anæsthetic was the subject of inquiry at Torbay, where an elderly woman died during an exploratory operation. In this case the A C E. mixture was used, and death proved to be due to the passage into the larynx of vomited matter. A verdict of death from suffocation was returned.

Pass Lists.

Trinity College, Dublin, Michaelmas, 1902.

FINAL Examination in Midwifery.—Seaton S. Pringle, Arthur A. Burrell, Anthony H. Corley, Thomas W. Crowley, Alexander H. Marks, Henry T. Brady; Walter G. M. Anderson and James E. Johnston; William Leggett and William P. Ringland; Walter R. H. Smith and Horace M. D. Townshend; Charles Ff. Rolleston; Thomas E. Ff. Manning and William I. de C. Wheeler; and Charles A. Stone.

(a) "Hygiene and Public Health." Parkes and Kenwood. Second Edition. Pages xii. and 763. London: H. K. Lewis. 1902

Notices to Correspondents, Short Letters, &c.

☛ **Correspondents** requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

J. D. E. (Buxton).—There is no ethical rule on the point, but our correspondent will understand that the best course to pursue is that which is governed by good taste.

Hollicops.—Saint Moritz, where the patient should remain until the end of next March, or the beginning of April.

Senex.—Our correspondent should consult a surgeon who devotes his attention to genito-urinary diseases. We cannot advise him further in the matter.

Colonial Surgeon.—Apply to the Dean of the West London Post-Graduate College, West London Hospital, Hammersmith, from whom full information can be obtained.

J. D. Most of the large Metropolitan hospitals have now Masonic Lodges connected with them. There are, however, two or three notable exceptions, for example, Guy's, University College, and King's The first two founded were the Rahere (St. Barts.) and the Cavendish (West London Hospital), each between six and seven years ago

Pes Anserinus.—The electric installation would cost about £40.

Meetings of the Societies, &c.

LONDON.

Wednesday, December 10th.

Pharmaceutical Society of Great Britain (17, Bloomsbury Square, W.C.).—8 p.m. Adjourned Discussion on Mr. J. C. Umney's paper on Drug Standards.

Dermatological Society of London (11, Chandos Street, Cavendish Square, W.)—5.15 p.m. Demonstration of Cases of Interest.

Hunterian Society (London Institution, Finsbury Circus, E.C.).—8.30 p.m. Clinical Evening.

Thursday, December 11th.

British Gynæcological Society (20, Hanover Square, W.).—8 p.m. Specimens will be shown. Paper:—Mr. S. Bishop: Procidentia Uteri. with Special Reference to an Operation upon the Sacro-uterine Ligaments.

Ophthalmological Society of the United Kingdom (11, Chandos Street, Cavendish Square, W.).—8 p.m. Clinical Evening. Cases will be shown by Mr Mayou, Dr. Edridge-Green, Mr. C. Blair, Dr. B. Potter, Dr. E. Maddox, Mr. S. Stephenson, Mr. N. C. Ridley. and Mr. E. T. Collins.

Medical Graduates' College and Polyclinic (22, Chenies Street. W.C.).—5.30 p.m. Mr. Mayo Robson: The Surgery of the Gall Bladder.

Friday, December 12th

Society for the Study of Disease in Children (11, Chandos Street, Cavendish Square. W.).—5 p.m. Special Meeting. Discussion on Tuberculous Peritonitis.

South-West London Medical Society (Bolingbroke Hospital, Wandsworth Common).—8 45 p.m Paper:—Dr. C O. Hawthorne: The Diagnostic Value of the Visual Field.

Clinical Society of London (20, Hanover Square, W.).—8.30 p.m. Papers:- Mr. S. Paget: The Subcutaneous Injection of Paraffin in Cases of Nasal Deformity. Dr. W. Carr and Mr. E. Roughton: Typhoid Fever, Perforation, Laparotomy, Death. Mr. A. A. Bowlby: A Second Case of Laparotomy for Perforation in Typhoid Fever, Recovery. Mr. H. J. Waring (introduced by Mr. A. A. Bowlby): Five Cases of Typhoid Perforation treated by Laparotomy.

Tuesday, December 16th.

Medical Graduates' College and Polyclinic (22, Chenies Street, W.C.).—5.30 p.m. Dr. Theodore Williams: The Diagnosis of Pulmonary Tuberculosis.

Appointments.

Boycott, A. E., M.A., M.B., B.Ch.Oxon. B.Sc. Oxon., Assistant House Physician to St. Thomas's Hospital.

Bradford, A. B., M.B., B.S.Durh., L.R.C.P.Lond., M.R.C.S., Assistant House Surgeon to St Thomas's Hospital.

Burghard. F. F., M.B.Lond., F.R.C.S.Eng., Teacher of Operative Surgery to King's College.

Carless, A., M.B.Lond., F.R.C.S.Eng., Professor of Surgery to King's College.

Cheyne, W. **Watson**, C.B., F.R.S., Professor of Clinical Surgery to King's College.

Child, F. J., M.A., M.B., B.C.Cantab., L.R.C.P.Lond., M.R.C.S., Senior Obstetric House Physician to St. Thomas's Hospital.

Coates, J., L.R.C.P.Lond., M.R.C.S., House Surgeon to St. Thomas's Hospital.

Hamilton, A. D., M.B., L.R.C.P.Lond., House Surgeon to St. Thomas's Hospital.

Hedley, J. P., M.A. M.B., B.C.Cantab., Assistant House Surgeon to St. Thomas's Hospital.

Henderson T. B., M.A., M.B., B.Ch.Oxon., Assistant House Surgeon to St. Thomas's Hospital.

Hildersheim, O., B.A., M.B., B.Ch Oxon., Clinical Assistant in the Electrical Department at St. Thomas's Hospital.

Hill, W., B.A.Cantab., L.R.C.P.Lond., M.R.C.S., House Surgeon to St. Thomas's Hospital.

Hudson, A. C., M.A., M.B., B.C.Cantab., House Surgeon to St. Thomas's Hospital.

Jones, B. S., L.R.C.P.Lond., M.R.C.S., Clinical Assistant in the Ear Department at St Thomas's Hospital.

Mavrogordato, A., L.R.C.P.Lond., M.R.C.S., House Physician to St. Thomas's Hospital.

Rob, J. W., B.A., M.B., B.C.Cantab., Assistant House Surgeon to St. Thomas's Hospital.

Scott, S. G., M.A., M.B., B.Ch.Oxon., Clinical Assistant in the Ear and Throat Departments at St. Thomas's Hospital.

Sears, C. N., L.R.C.P.Lond., M.R.C.S., Assistant House Physician to St. Thomas's Hospital.

Sedgwick, C. H., M.A., M.B., B.C.Cantab., House Physician to St. Thomas's Hospital.

Shipman, G. A. C., M.A., M.B., B.C.Cantab., L.R.C.P.Lond., M.R.C.S., Junior Obstetric House Physician to St. Thomas's Hospital.

Spurrier, H., B.A.Cantab., L.R.C.P.Lond., M.R.C.S., House Surgeon to St. Thomas's Hospital.

Wheen, C., B A.Oxon., L.R.C.P.Lond., M.R.C.S., Clinical Assistant in the Skin Department at St. Thomas's Hospital.

Vacancies.

Borough Asylum, Canterbury.—Assistant Medical Officer. Salary £120 per annum, with furnished apartments, board (except alcoholic beverages), and laundry. Applications immediately to the Medical Superintendent, Borough Asylum, Canterbury.

Brown Sanatory Institution.—The office of Professor-Superintendent will shortly become vacant. Salary £250 per annum. Applications to the Secretary. (See Advt.)

Children's Hospital Dublin.—Assistant Surgeon; House Surgeon. Salary 50 guineas per annum with apartments, fire, light, and attendance. Immediate application to H. C. Mooney, Hon. Sec. (See Advt.)

Essex and Colchester Hospital.—House Surgeon. Salary £100 per annum, with board, washing, and residence in the Hospital. Applications to C. L Becher Secretary.

Manchester Royal Infirmary.—Resident Medical Officer at the Convalescent Hospital, Cheadle. Salary £150 per annum, with board and residence. Applications to W. L. Saunder.

Rochdale Infirmary.—Resident Medical Officer. Salary £100 per annum, with board, residence, and washing. Applications to R. W. Shaw, Esq. Southfield, Rochdale.

Royal South Hants and Southampton Hospital.—House Physician. Salary £100 per annum with rooms, board, and washing found. Applications to T. A. Fisher Hall, Secretary.

South Devon and East Cornwall Hospital, Plymouth.—Secretary. Salary £300 per annum. Applications at the hospital to the "Chairman and Committee."

The General Hospital, Birmingham.—Resident Surgical Officer. Salary £100 per annum, with residence, board, and washing. Applications to the House Governor.

Birth.

Platt.—On Dec. 4th, at 18, Hall Road, Maida Vale, the wife of A. F. R. Platt, M.B., of a daughter.

Marriages.

Baxter—Richards.—On Dec. 4th, at Blandford, Dorset, Stephen Edward Baxter, M.R.C.S.Eng., L.R.C.P.Lond., of Wollaston, Northants. to Mary Emma, eldest surviving daughter of the late O. C. Richards, Esq., and Mrs. Richards, of Langton Villa, Blandford.

Carter—Wood. On Dec. 3rd, at Paisley, Frederick John Carter, M.R.C.S., L.R.C.P., son of the late Rev. Canon Carter of Linton, Kent. to Janet Lang, eldest daughter of John A. Wood, Esq., of Park Gate, Paisley. N.B.

Knyvett Gordon—Archer.—On Dec. 3, at St. John's, Walham Green, S.W., Alec Knyvett Gordon, M.B., B.C., B.A.Cantab., Medical Superintendent of Monsall Hospital, Manchester, to Gertrude Mildred, daughter of the late Major Lewis Archer.

Shepherd—McElney.—On Dec. 4th, at the First Presbyterian Church, Antrim, Thos. S. Shepherd, M.B., Ch.B., eldest son of Charles Dunbar Shepherd, Greystone, Arnside, to Elizabeth McElney, M.B., Ch.B., youngest daughter of the late William McElney, Randalstown, co. Antrim.

Deaths.

Berry.—On Dec. 5th, at 31, Sherriff Road, West Hampstead, Edward Unwin Berry, M.R.C.S., in his 92nd year.

Jackson.—On Dec. 6th, at 94, Broadhurst Gardens, Hampstead, N.W., Frederick, second son of J. T. Jackson, M.R.C.S., aged 52 years.

Kilgour.—On Dec. 4th at 2, Keynsham Bank, Cheltenham, John Stewart Kilgour, M.D., aged 87.

Langford.—On Dec. 3rd, at Sunnyside, Hornsey Lane, N., Charles P. Langford, M.R.C.S., &c., aged 67.

THE BROWN ANIMAL SANATORY INSTITUTION.

(Under the Government of the University of London).

The office of PROFESSOR-SUPERINTENDENT of the above Institution is about to become vacant, and applications for the appointment are invited. The salary is £250 per annum.

Applications should be addressed, not later than WEDNESDAY, DECEMBER 31st, to the Secretary of the Institution, 149 Wandsworth Road, S.W., from whom information respecting the duties of the office may be obtained.

December 9th, 1902.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, DECEMBER 17, 1902. No. 25.

Original Communications.

THE CONTROL OF CONSUMPTION BY THE PUBLIC HEALTH AUTHORITY.(a)

By T. PERCY C. KIRKPATRICK, M.D.,
Assistant Physician, Dr. Steevens Hospital, Dublin.

IRELAND occupies the unique and unenviable position of still having an increasing mortality from tuberculous disease. Thus, in this country, in the year 1900, phthisis caused 10,076 deaths, out of a total of 87,606, or a rate of 225·6 per 100,000 of the estimated population, or more than one-ninth of the rate from all causes combined, you will see that it is time that we were up and doing if we do not wish to be left hopelessly behind other countries in the advance towards that satisfactory condition of public health which Preventive Medicine appears to promise. In other countries the efforts to prevent phthisis have been rewarded with a very marked degree of success. Thus, in the city of New York, the death-rate from phthisis has been reduced by over 30 per cent. since the adoption of preventive measures some ten years ago, and similar gratifying results have been obtained elsewhere. Let us consider then carefully the methods by which these results have been obtained, and by a study of the conditions existing in our own country see if we can learn any useful lessons for our future guidance.

As early as the year 1894 the campaign was opened in Manchester by the distribution of handbills to every house in the city, giving instructions in precautionary measures; but at that time there was no possibility of ascertaining whether the measures so advised were adopted or not. I think we may fairly conclude that, among the poorer classes at all events, very little attention was paid to such instructions. In order then to enable the public health authorities to exercise some supervision over such cases, and, where necessary, enforce the adoption of preventive measures, a very complete scheme was drawn up and adopted by the City Council in the year 1899, and this, with certain additions and modifications, has been in force ever since. The main lines of this scheme may be grouped under the following heads:—

1. Voluntary notification of consumptive cases.
2. Education of the public in general, and of the patient and his friends in particular, in the nature of the disease.
3. Treatment of the patient's surroundings.
4. Supervision.
5. Provision of isolation hospitals.
6. Protection of the food supply from contamination by the tubercle bacillus.

By far the most important part of this scheme, from an administrative point of view, is the adoption of notification, as without this the Executive has no means of knowing where the cases are, and so is unable to carry out effectively any preventive measures. In Manchester no attempt was made to bring phthisis under the provisions of the Infectious Disease Notification Act of 1890, but practitioners were asked to notify cases, and a scale of fees payable for such notification was drawn up. The names and addresses of the cases notified were registered and if it was thought advisible further steps were taken with a view to supervision and inspection. A very important adjunct to notification in the form of the free bacterial examination of sputum was undertaken for medical practitioners, so that in all cases the diagnosis could be confirmed. If such examination gave negative results the medical man was asked whether he still adhered to his diagnosis, and, if so, the case was considered one of phthisis from an administrative point of view. The education of the patient and his friends in the nature of the disease is personally undertaken by the assistant medical officer, who visits the house after the case has been registered. An effort is made to educate the public generally by the posting of notices pointing out the danger of promiscuous spitting in railway stations, tramcars, public-houses, common lodging-houses, workshops, &c.

As regards the treatment of the surroundings, the assistant medical officer reports any sanitary defects in houses visited, and they are dealt with by the ordinary methods of the Sanitary Department, while the special disinfection is carried out under the supervision of the sanitary inspectors. The ceilings are lime-washed, the walls rubbed down with dough, the floor, woodwork, and furniture are washed with ordinary soap and water. This process the inhabitants carry out themselves under supervision. If, however, the house is very dirty, or evidently infected, the Corporation disinfects the walls, floors, ceilings, and articles of furniture by washing with one per cent. of chlorinated lime, the paper usually being stripped from the walls in every case. The clothing, bedding, &c., are disinfected by steam.

Manchester has not yet been able to do much in the way of provision of hospital accommodation, either as sanatoria for the early cases, or isolation hospitals for the advanced cases, but in this respect there will probably be a marked advance in the future. Very elaborate precautions are adopted to prevent infection by either meat or milk; but in view of the pronouncement of Koch on the transmissibility of bovine tuberculosis, it is hardly to be expected that other places will adopt any new or expensive methods of prevention in this department while the question is still *sub judice*.

The adoption of precautionary measures in New York City is largely due to the energy of Dr. Herman Biggs, who has given such an admirable description of what has been done there. The first official action was taken in New York in the year 1889, when the Board of Health asked the consulting pathologists of the Department for a report on the causation and prevention of tuberculosis. This report was presented in the same year, and laid particular stress on the following points:—Tuberculosis is a preventable disease; it is not directly inherited, but transmitted from the sick to the healthy, chiefly by means of dried sputum suspended as dust in the air. From this report, presented twelve years ago, we learn as fully and completely as we can at the present day the nature of the problem that we have to deal with, and all subsequent work on the subject has simply confirmed and amplified these statements. On the receipt of this report the Board of Health consulted with many of the leading physicians of New York, and as a result decided that the medical profession and people were not prepared to accept active preventive measures founded on the belief that tuberculosis was an infectious disease. This being so, little was done except inspection of food and an endeavour to disseminate knowledge as to the nature of tuberculosis. So effectively, however, was this latter measure carried out that during the winter of 1893-94 the Board of Health, on the recommendation of Dr. Biggs, adopted certain resolutions giving effect to the following principles:—Notification, inspection and disinfection of infected dwellings. A request was made for the voluntary notification of cases of tuberculosis under the care of the physicians in the city. It was pointed out to the physicians that this information was solely for the use of the Department, and that in no case would visits be made by the inspectors unless the patient resided in a boarding house, tenement house, or hotel, except at the request of the attending physicians, and even in the case of such places if the physician requested that visits should not be made, and signified his willingness to afford the necessary instruction to the patients, no further steps would be taken by the Department. Compulsory notification was adopted in the case of public institutions, such as hospitals, prisons and asylums, &c. Visits of inspection with a view to affording instruction and to report on the necessity for further steps, were determined on in the case of tenement houses, boarding houses and hotels, except in those cases provided for above. In every case where the premises which had been occupied by a consumptive were vacated, either by death or removal, visits were made by the inspector, who directed the removal of infected articles such as bedding, carpets, &c., for free disinfection by the Department, while the owner was compelled to have the premises disinfected at his own expense. No person other than those residing there at the time were allowed to occupy such apartments till this order had been carried out. Bacteriological examination of the sputum was undertaken free of charge by the Department, provided that it was sent in bottles accompanied by a paper setting forth the name, age, sex, and address of the patient. Suitable bottles and blank forms to be filled in were supplied free to those who wished to make use of them.

(a) An Abstract of the Inaugural Address read at the Opening Meeting of the twenty-eighth Session of the Dublin University Biological Association, November 27th, 1902.

During the first year after the commencement of the work 4,166 cases of tuberculosis were notified, during the second year 5,824, during the third year 8,334, while in 1900 the cases numbered 11,997; the number of houses inspected has increased proportionally. As a result of this, Dr. Biggs is able to make the following statement:—

"There has been a reduction in the mortality from tuberculous diseases in New York City since 1866 of more than 35 per cent.; and I have no hesitation in saying that I believe with a complete and efficient scheme for dealing with pulmonary tuberculosis, including hospital accommodation and the proper enforcement of precautionary measures, the death-rate from the tuberculous diseases in New York City may be further reduced one-third within a period of five years. This would mean a saving of 3,000 lives annually."

I propose to devote the remainder of the time at my disposal in considering a plan of campaign which would be applicable to our conditions here.

It is no longer necessary to argue the question of the advisableness of municipal control of public health; it will, I think, be granted that under present conditions it is only by such authority that large questions of public health can be at all satisfactorily dealt with. Taking for granted then that the already constituted public health authorities are the proper bodies to deal with this question, let us consider what course of procedure we can recommend for their adoption.

It seems almost a truism to say that the first essential in the administration of any disease from a public health point of view is that the responsible authority should be in a position to know where the cases of that disease exist. The only way in which this knowledge can be obtained is by notification, and the only form of notification which has been found to work satisfactorily is compulsory notification. Although this is so, there is, perhaps, no point in the administration of preventive measures against phthisis which has been so hotly disputed, and about which there are so diverse opinions, as the adoption of compulsory notification. The advantages to be derived from notification are so obvious that it is unnecessary to dwell on them further than to say that without its aid it is difficult to see how any substantial progress can be made. Let us then examine the objections against it, and see if they are of such a nature as to compel us to abandon a means from which so much good is to be expected. Much confusion has arisen from the idea that if compulsory notification is adopted it is necessary to put in force in regard to phthisis all the provisions of the Public Health (Ireland) Act, 1878, and consequently render phthisical persons who expose themselves in public liable to the penalties which that Act entails. Such a state of affairs would undoubtedly be intolerable in the case of a chronic disease like phthisis; depriving, as it would, many who were well able to work, of their liberty, and involving the State in an enormous expense for their support.

There is no doubt that at first notification appears a hardship and a breach of that most sacred trust, professional secrecy; but we must remember that the principle has been accepted on the grounds of public utility, and in many cases in this country the provisions of the Act have been voluntarily adopted by the District Councils, though they are composed almost entirely of laymen. If the lay public wish to absolve medical men from this bond of secrecy, in definite cases and for definite ends, there does not appear any reason for objection on the part of the medical men themselves. Notification to the sanitary authority does not mean notification to the community at large, and, if carried out on the lines adopted in Manchester and New York, does not involve any hardship to the individual unless that individual, by his neglect of proper precautionary measures, makes himself a source of danger to the community. Surely in such cases the community has the right of protecting itself from such persons. There is one objection which I fear will carry more weight, in this country at all events, than all the others, and that is the expense involved. It is unreasonable to expect, and unfair to ask, medical men to work for nothing, and undoubtedly the notification fees in a city like Dublin would form a considerable item for some years to come. We must remember, however, that it is an item which will decrease rather than increase, and which promises the very best value for the money expended. No doubt the fact that one case would be notified again and again by different practitioners would add to the expense. This appears to be unavoidable; but the difficulty would, I believe, be greatly lessened if medical men were asked to try and find out, as far as possible, if the cases had been already notified. There is another difficulty, and one to my mind of much more importance than those already urged, and that is the impossibility in many of the early cases of making any sort of an accurate diagnosis without a bacteriological examination of the sputum. It would be out of the question to expect the busy and overworked dispensary medical officers to undertake such examination. Thus to make notification efficient some method of free examination of sputum must be devised. This, of course, would be quite simple if we were provided with a properly fitted bacteriological laboratory. The necessity for such an institution in the city has been urged again and again, but so far without result, apparently on account of the expense it would entail. Although such an institution would be of the utmost value, not only for the administrative control of phthisis, but for the sanitary administration in general, yet I believe that it would not be an absolute essential, at the outset at all events, in our campaign against phthisis. For the detection of tubercle bacilli in sputum no costly or elaborate appliances are necessary, and I believe it would be possible for the sanitary authority to carry it out even with the means at their disposal in the city at present. It is possible now in private cases to have the report of a skilled bacteriologist on tubercular sputum at the cost of three shillings. In the City of Manchester for the year 1901, specimens to the number of 517 were examined for the Public Health Authority, under the supervision of Professor Delépine, at Owens College. Would it not be possible for the Public Health Authority here to contract with pathologists in the various centres of the city to examine sputum, and report to them the results at a cost which would be quite insignificant compared with what would be necessary for the establishment and equipment of a laboratory? In Manchester during the same year 1,339 fresh cases of phthisis were notified, while 1,142 deaths were recorded; so that from these figures we may conclude that in Dublin the adoption of the scheme I have outlined would not be so very costly.

The immediate result would be to place the sanitary authorities in a position to deal with tuberculosis both effectively and cheaply. Let us see then what measures we can recommend to them for this purpose. The future extinction of tuberculosis can be hoped for only as the result of the combined efforts of the community, both lay and medical, and the only way that we can obtain such a combination is by the education of the public in the nature of the disease. One of the first duties then of the sanitary authority will be the diffusion of such knowledge. This will be much more simple and direct when given to the patients and their friends than when simply given to the public in general. Information about matters which personally concern us or our friends is much more likely to be fruitful than when to us it appears merely of general interest. The sanitary inspectors will be able to impart such information to patients of the poorer classes directly, and at the same time give instruction how the danger of infection of the healthy by the diseased may be avoided. For this purpose, as well as to see that the instructions given are carried out, regular and systematic inspection of the homes of the tuberculous should be carried out. The whole experience of sanitary supervision at the present day tends to show that such inspection will be welcomed rather than objected to, in spite of what *a priori* considerations would lead us to believe.

There is one other part of any scheme for the prevention of consumption to which I must allude—a part, too, which appears at the outset to be far the most formidable of all. I refer to the provision of isolation hospitals. In the first place, I should like to point out that the Public Health Authority has only to deal with, and provide for, the health of the community at large, and not with that of the individual. Consequently, it is only so far as the health of the individual affects that of the community that it comes within the jurisdiction of the Public Health Authority. Consumptive patients, then, come within the jurisdiction of this authority, because of the danger which exists of their spreading the disease, and because of their number, which causes such an important item in the increase in the death-rate. Were it not for the existence of the first of these two reasons the Public Health Department might completely neglect the consideration of phthisis. Take, for example, the case of cancer. The death-rate from this disease in Ireland during the year 1900 was 0·6 per 1,000, and caused 1,469 more deaths than small-pox, measles, scarlatina, and diphtheria taken together; yet since, so far as we know at present, a cancer patient is not in himself a source of danger to the community, the Public Health Authority takes no steps as regards his control. This is a point of great importance, since it absolves the Public Health Authority from direct responsibility for the provision of sanatoria for the cure of the disease. Of course, in so far as such sanatoria are a valuable means of prevention they come within the scope of this authority, but only so far. There are two separate and distinct classes to be dealt with in regard to hospital accommodation—those early cases in which permanent arrest or complete cure may be expected, and those cases which are so far advanced that no improvement beyond mere alleviation of symptoms can be hoped for. With the adoption of proper precautionary measures the first class need not be a source of danger to the public at all, and it is only in so far as they form the constant recruiting ground for the second class that it becomes our duty to try and cure them by the provision of sanatoria. Such patients, however, are isolated in sanatoria for their own good, and it is difficult to see how they could be compelled to enter such institutions against their will, provided they conducted themselves in such a way as not to be a source of danger to others. With the second class it is different, for since they are unable to work and support themselves they will in consequence be unable in the majority of cases to adopt the necessary precautionary measures, and so may fairly be compelled to submit to isolation. While then we look on sanatoria for the treatment and cure of phthisis as a most useful preventative measure, still they must not be considered as essential; and even without their aid we may hope for a very large measure of success in our efforts towards the stamping out of the disease. Let us see, however, if we cannot make more use of the means already at our disposal, for there is no doubt that in the near future, when the public become more alive to the necessities of the case, the provision of funds for the erection of sanatoria will be much more readily forthcoming. At the present time it is the rule in our Dublin hospitals to refuse as far as possible admission to phthisical patients, on the grounds that they are unsuitable for treatment in a general hospital. I say advisedly as far as possible, for cases are constantly presenting themselves with hæmorrhage or some other complication, which renders it impossible to refuse admission. In consequence of this you will constantly find phthisical patients in the general wards of our hospitals side by side with other patients who are, perhaps, in a condition which renders them peculiarly liable to the infection. That this state of affairs does exist I have satisfied myself by personal investigation, and under the present circumstances, do what we may, it must exist. Now, if each hospital were compelled to open at least one ward each, solely for the reception of phthisical patients it would be possible to isolate these cases, and the benefit from the point of view of the education of the patients would be enormous. I know that there are many objections to such a scheme, but none of them appear to me to be insuperable. First of all, we must remember that the hospitals are primarily for the benefit of the sick poor, and it seems unjust to exclude such a large and deserving class as the phthisical; while it is equally unjust to submit those who are not so suffering to any unnecessary risk. Thus, quite apart from any anti-tuberculous campaign, there is a distinct need for some such arrangement. Then we are told that the air of a general hospital is most unsuitable for the treatment of such cases, but we must remember that very many cases are greatly benefited, when suffering from some complication such as hæmorrhage or an acute attack of bronchitis, &c., by a few weeks' residence in hospital. In such cases it may make all the difference to the possibility of their future cure. Again, in cases which are rapidly approaching their end such wards would be most suitable, as it is far more preferable that they should disseminate their infection in a ward reserved exclusively for persons with the same disease than that they should do so in their own homes. I cannot believe that these wards, if properly cleaned and periodically disinfected, would be a source of danger in themselves. The chief objection is on the score of expense—the hospitals say that they cannot afford to open special wards, but the expense would be trivial compared with that which would be necessary for the erection and establishment of special sanatoria. If the Corporation and Trustees of the Hospital Sunday Fund would make some extra special grant to hospitals which provided such wards this objection would probably vanish at once. I do not wish to be understood as claiming that such a scheme would do away with the need for sanatoria altogether, but it would satisfy the pressing need for them from the point of view of the Public Health Authority, and so greatly lessen the initial expense of our campaign. It seems hardly possible to apply the insurance system towards the maintenance of sanatoria in this country, as has been done with such success in Germany. Free medical attendance is so easily obtained by everyone of the working class that any attempt to establish such a system of insurance, if the premiums had to be deducted from the weekly wages, would probably meet with great opposition. Most of our large trading and manufacturing companies do provide medical attendance, not only for their employés but also for their wives and families. It is just in this class that consumption is most rife—that is, among those who have to spend their lives in factories and workrooms, where the most favourable conditions for infection are to be found. Would it not be possible for some of the great trading companies to join together for the purpose of founding and maintaining sanatoria for the treatment of consumptives among their employés and their families? I feel sure that the funds so used would not be grudged by the shareholders, and the good which would result from such a scheme would be incalculable.

A PRACTICAL COLOUR-TEST.

By KENNETH SCOTT, M.B., F.R.C.S.,
Consulting Ophthalmic Surgeon to St. Mary's Children's Hospital, E.

THIS test is essentially for the practical purpose of proving the efficiency, or otherwise, regarding the correct appreciation of colour, of those wishing to be employed on railways, in navigation, or any other occupation, where directions are conveyed at times by signals formed of coloured lights. It is the power of instantly and correctly recognising the coloured lights so employed, and not the relative comparisons of tints or shades of colour, which is required from such individuals. The test now described does not replace or supersede the more minutely detailed examination for colour-perception, either qualitative or quantitative, which may be additionally investigated whenever necessary.

As only four colours are ordinarily used when signalling with lights, the colours in this test are similarly limited; and when the examiner is satisfied that these can be quickly and correctly recognised in a practical manner, there can be no hesitation in stating that the individual under question is perfectly qualified, in this special particular, for employment in any of the avocations just mentioned.

The colours referred to are a bright white or clear yellow light, also red, green, and violet-coloured lights. Artificial illumination is used so as to more closely simulate the actual working conditions, and the various coloured glasses are interposed in front of it, a piece of frosted glass also being introduced among the coloured ones for the purpose of confusion.

A disc in which these glasses are mounted, revolves, in front of an aperture, on the ordinary shield screening the opthalmoscopic lamp, or on an asbestos or other chimney specially used for the purpose; there are five round apertures, of about 10-15 mm. diameter each, at regular intervals near the margin of the disc; one of these is unoccupied, and the other four are each filled by a piece of red, green, violet (or purple) and plain frosted glass. The degree of illumination coming through the aperture, can be modified by the use of an iris-diaphragm, or by the intervention of another separate disc, revolving on the same axis as the previous one, and with a series of holes pierced in it, ranging from 1-6 mm. or larger, in diameter. Another piece of frosted glass mounted on a separate small arm, and placed so as to work on the same axis as these two discs, can be combined with any of the other glasses in order to still further modify or diminish the intensity of the rays of light which pass through. There is no need to change the distance at which the test-lamp is placed during the examination, to obtain the alteration which would occur in the light if it were seen under actual working conditions at a far distance, as the colour-test offers variations which are sufficient for this purpose.

When the foregoing means are not available, a simple and almost equally practical, and similarly accurate, method for arriving at a proper conclusion as to the power of colour discrimination is to employ a series of rounded pieces of paper, 35-40 mm. in diameter, of the same colours as the lights—pale yellow, red, green, and violet; these are placed on a dark background which has a dull surface. These are mounted on a board, at each end of which there are eyelets, so that it can be suspended from either end, or, by using both eyelets, it may be placed with either of its sides uppermost. This yields endless variation and change in the relative positions to each other of the colours; consequently their sequence cannot become committed to memory or learned by rote through frequent repetition, thus maintaining a sufficient and proper standard of unfamiliarity in the test. This possibility of completely and instantly transforming the appearance of the chart, also allows of the colours being indicated by name in the first instance, if deemed necessary, to the individual under examination, as it does not at all detract from its intrinsic value; this too, may be done when using the colours-test lamp. It is by no means an unknown fact that candidates have failed to pass in an examination, simply and entirely from insufficient knowledge, or even complete ignorance, of the *names* of the different colours, although at the same time being fully competent to otherwise distinguish, and unerringly recognise them. (*a*)

LATE DISEASE OF THE BRAIN AFTER INJURY.

By HR. STADELMANN,
Of the University of Berlin.

CASES of this kind were described long since by Bollinger. The diagnosis was most difficult when the so-called late bleedings came on weeks or months after the injury. I would rather call such cases late apoplexies in distinction to traumatic secondary hæmorrhage. A large series of such cases had been collected by Matthias and Bruns. An old man had received a blow on the head. There was no loss of consciousness, only headache; the man was away from his work a few days, and then looked up again. Later on he again became unwell, with headache, nausea, vomiting and loss of consciousness, and died. The autopsy revealed softening and hæmorrhage into the brain. Here the question came in as to the connection between the injury and the apoplexy, as softening in old people was not rare, and at first presented few symptoms. Those cases were more doubtful when a longer period such as a year intervened, and when the individual, in addition to the cerebral hæmorrhage, had nephritis, arterio-sclerosis, or other diseases. The encephalitis would be looked upon by many as a result of the injury; others would attribute it to the later arterio-sclerosis. Friedmann had reported a series of such cases. Here serious criticism was wanting. Thus, for example, in a case where cerebral changes were attributed to an injury suffered twenty-three years before. That arterio-sclerosis could come on in such cases by an unsuitable mode of life, want of exercise, improper feeding, &c., was possible, but no direct connection between the injury and the cerebral disease could be proved.

(*a*) These apparatus are made by the Anglo-American Optical Company, 47, Hatton Garden, London, E.C.

In order to bring the cerebral changes into connection with the disease, the following conditions must be fulfilled :—1. The patient must have been healthy and sound before the receipt of the injury, and must not be of great age. 2. The injury must have been considerable. 3. The symptoms must have developed before our eyes. According to some authors, the diseased vessels must be opposite to the injury. The speaker recognised the occurrence of late disease after injury to the skull. After injury, disturbance of circulation followed, and from this softening and late hæmorrhage. He related the following case that was sent to him for an opinion. A man, æt. 47, was at work in January, 1900, when a stone fell upon his head. He had previously been perfectly healthy ; there had been no syphilis. Two and a half years afterwards the patient was examined. He was very stupid, complained of giddiness and headache, otherwise he was in good condition and the internal organs were sound. There was great loss of mental power, the man knew nothing definite about his previous injury, could not say what month or week it was, and could not do the simplest arithmetical problems. According to the report, the patient had lain unconscious after the accident for about five minutes, was taken home, and had scarcely thought of the accident afterwards. He was attended for several weeks on account of the wound on the scalp, and had kept his bed a few days. After four to five weeks he became much depressed, and had attempted suicide twice. Since then his condition had got gradually worse, depression alternated with maniacal attacks. He had been treated in six different institutions without result. He had formerly been addicted to alcohol, but he could no longer bear it. There was a cicatrix tender on pressure at the site of the injury between the frontal and temporal lobes, which was not fixed to the underlying bone. In this case serious cerebral changes took place in consequence of the injury, although the first symptoms did not present themselves until four weeks after receipt of the injury.

A second case was that of a man, æt. 29, who was brought unconscious into his wards. On the following morning he had partly regained his speech, but could not pronounce properly. From his wife it was gathered that four weeks previously he had received a blow on the head, had fallen unconscious, but had quickly recovered himself and been bright and well since. In spite of a wounded head he had gone to his work, and had been in good spirits. Suddenly in the night he had been attacked with convulsions, and became unconscious and taken to hospital. He had not suffered from syphilis, and had not been a drinker. At that time there was no paralysis, his mind was not clear, and he mostly slept; the internal organs were healthy. On examination, a cicatrix fixed to the bone was found near the motor centre. Epileptic attacks now came on, always starting from the left arm. These, followed by unconsciousness, became worse, so that the only hope lay in an operation. Hæmorrhage from the dura in an abscess was thought possible, but at the operation no hæmorrhage was found and no abscess. The patient got steadily weaker, pneumonia set in, and he died. At the autopsy nothing abnormal was found in the skull, but in the region of the motor centre on the right was a softening and deep hæmorrhage that had made a cavity for itself. He explained the condition in this way : the blow was from behind, the head being bent; softening and hæmorrhage had been caused by contrecoup. Such cases were of great forensic importance, and the case had occupied the courts, the assailant being sentenced to a long imprisonment.

A third case was related, in which a man was brought unconscious into hospital on November 17th, 1901. Seven weeks before he had fallen and struck the back of his head. After a short loss of consciousness he went home and in a few days returned to work, but always complained of headache. Then suddenly, seven weeks after the injury, he had a rigor with following fever, vomiting, and hallucinations, and was taken to hospital. The internal organs healthy. Lumbar puncture gives purulent fluid containing numerous staphylococci and pneumococci. Death took place in a few days. The post-mortem showed purulent cerebro-spinal meningitis. There was a fissure in the skull only partly healed. It was a rare thing for a fracture to heal, and for meningitis to come on seven weeks afterwards. Such observation showed us that cases with serious head injuries should be kept a long time under notice. The speaker always kept them in bed for at least four weeks, and did not dismiss them for at least six.

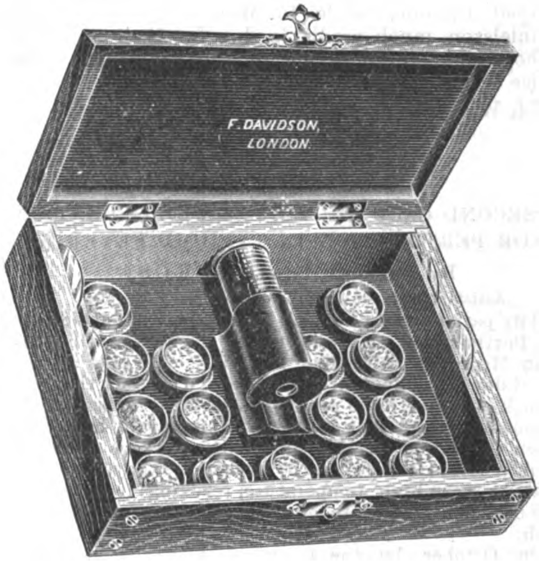
AN IMPROVED MODEL EYE.

By PERCY DUNN, F.R.C.S.,

Ophthalmic Surgeon to the West London Hospital; Lecturer on Ophthalmology at the West London Post-Graduate College.

The next best thing to practising retinoscopy and the use of the ophthalmoscope with the human eye is to employ an appliance which almost answers the same purpose.

Believing, however, that a model eye completely fulfilling these requirements has, so far, not been available for practitioners and students, I proceeded, some time ago, to devote attention to the subject, and I now venture to think that the result described below will be helpful in supplying the need indicated.



The model itself is an improvement upon a design which has for some years been known in America. It consists of two brass (blackened) cylinders, one of which is fixed on a stand, the other being movable, sliding backwards and forwards inside the former. On the movable cylinder is a printed graduated scale by which a maximum of myopia of 6 D. and of hypermetropia of 6 D. can be measured. At one end of the fixed cylinder is a lens of 2 ins. focus, thus enabling the observer, by altering the position of the movable cylinder, to produce various degrees of ametropia. The beginner, for example, might make the model eye myopic to 4 D., and proceed with the lenses taken from an ordinary trial case to estimate the defect; having arrived at the correction he can then ascertain by looking at the graduated scale whether his result corresponds therewith. Furthermore, different lenses are provided with the model, by which various degrees of astigmatism can be created by merely inserting one or other of the lenses in front of the lens in the fixed cylinder. In addition a diaphragm is supplied, to be placed in the slot in front of the 2 in. lens, for the purpose of representing the pupil in an undilated state.

For the study of changes in the fundus, seventeen metal discs are provided, so made as to cover the outer end of the movable cylinder, each containing an ophthalmoscopic drawing. On the reverse of these discs a number is placed which corresponds with a number on a printed list fixed inside the lid of the box, the idea being that the student should first examine the drawing with the ophthalmoscope in the ordinary way, and make a diagnosis of the condition of the fundus depicted before referring to the list. The following is the list of drawings in question :—

(1) Optic neuritis. (2) Posterior staphyloma. (3) Coloboma of the choroid. (4) Normal eye. (5) Retinitis pigmentosa. (6) Opaque nerve-fibres. (7) Syphilitic neuro-retinitis. (8) Detachment of the retina. (9) Sarcoma of the choroid. (10) Advanced chronic glaucoma. (11) Sub-hyaloid hæmorrhage. (12) Albuminuritic retinitis. (13) Post neuritic atrophy. (14) Disseminated choroiditis. (15) Embolism of the central artery of the retina. (16) Rupture of the choroid. (17) Primary atrophy of the optic nerve.

The model is manufactured and supplied by Mr. F. Davidson, optician, 140, Great Portland Street, W., to whom I am much indebted for the skill and care with which my ideas have been carried out. The ophthalmoscopic drawings were all executed by Mrs. Davidson, whose artistic talents are well displayed therein; while to Messrs. Bale, Son and Danielsson much credit is due for their excellent lithographic reproduction of the drawings. The price of the model is very moderate.

54, Wimpole Street, W.

Clinical Records.

A SECOND CASE OF SUCCESSFUL OPERATION FOR PERFORATION IN TYPHOID FEVER. (a)

By Anthony Bowlby, F.R.C.S.,
Assistant Surgeon to St. Bartholomew's Hospital.

The patient was a boy, æt. 10, who was admitted into St. Bartholomew's Hospital under the care of Dr. Norman Moore on September 1st, 1900. He was in his third day of typhoid fever, and beyond the fact that the attack was severe and prolonged, it called for no special comment, except that after the temperature had come down to normal on the thirteenth day, he suffered from a severe relapse on the twenty-first day, and had again a very high temperature, reaching to 105·4° on one occasion. The date of the relapse was September 19th.

On October 1st the temperature was still above normal (101°), and tympanites, which had been present throughout, was still well marked. There was also some crepitation at the bases of the lungs.

On October 2nd, after a slight shivering fit he became blanched and cold, his temperature sinking to 97·6°; but there was no subsequent evidence of hæmorrhage and no pain.

On the 3rd he seemed better, but the temperature was still 101°. The abdomen was less distended, and the bowels acted without enemata.

On the 4th his temperature was normal, but the abdomen was again distended. Pulse 96. A little before three in the afternoon he complained of some difficulty in micturition, and while passing his water was seized with severe pain in the abdomen. His temperature half an hour earlier had been 102·6°, but after his attack of pain he sweated profusely and the temperature dropped to 98°. For about half an hour the boy was screaming with pain and exceedingly restless. Then he became quieter and collapsed with sunken eyes, a cold sweat and shivering. The pulse had gone up meantime to 140.

I saw him at 4.30 p.m. with Dr. Norman Moore, and found his general condition as above described. The abdominal wall was hard and fixed during respiration, and I quite agreed with Dr. Moore that perforation had almost certainly taken place. and quite concurred with his proposal that an operation should be conducted at once.

At 5 p.m., therefore, two hours after the symptoms of perforation, the abdomen was opened in the middle line and free pus was at once found in the peritoneum. A considerable quantity of almost clear fluid welled up, but there was no large collection of fæcal matter. The intestine was so much distended that several coils of it had to be allowed to extrude, and were kept wrapped in hot towels. Many patches of inflamed peritoneum indicated the affected Peyer's glands. I then sought for the cæcum, and after finding it I rapidly passed the small intestine through my hands till I found a perforation situated less than two feet from the ileo-cæcal valve. The bowel was not adherent or otherwise altered, nor could any induration be felt in its walls, but the peritoneum corresponding to the shape of a Peyer's patch was very red and injected. The opening in the intestine was quite small, being not much larger than a pin's head.

I wiped the bowel clean, and then closed the opening by five Lembert sutures of fine silk. The greater part of the incision was now closed, and a glass drainage-tube was placed in its lower end. Owing to there being no complications the operation was completed in about twenty minutes, and at the end of it the patient's general condition was none the worse for the handling and exposure of the bowel. The peritoneum was not touched, but the intestines were carefully wiped clean, and all fluid was completely mopped up from the pelvis and elsewhere with sponges

For several days the boy remained very ill, and the morning after the operation the pulse was still 150, the temperature being 100·4°. There had been no sickness, and flatus was passed. He was fed by nutrient enemata, and only a little water or ice was given by the mouth. The abdomen remained distended. After this time there was steady and rapid improvement except for some sickness on October 7th, and a troublesome cough, so that by October 10th, six days after operation, the boy seemed to be convalescent.

On that day, however, he had a slight epileptiform attack, and in the evening a more severe and prolonged series of fits, necessitating the administration of chloroform. This threw him back and weakened him, but he again rallied, and in spite of a return of severe convulsions on October 20th, he ultimately recovered. The tympanitic distension of the abdomen which had been so marked throughout continued until the end of his illness.

I saw the boy some months later and found him to be in excellent health.

I have already recorded, about five years ago, a similar case of perforation of a typhoid ulcer in Vol. LXXX. of the Royal Medical and Chirurgical Society Proceedings (in conjunction with Sir Lauder Brunton), and in that case also, which had a similar satisfactory ending, the patient was operated upon late in typhoid fever, for he was in the sixth week of the illness, and was at the time suffering from a relapse. In that case there was much induration of the perforated Peyer's patch, and some consequent difficulty in suturing the ulcer, but in all other respects the cases had much in common, except that the boy whose case I now record was much more ill and disturbed at the time of the operation than was the first patient.

These two cases represent the only patients I have operated upon, and there can be no doubt that they represent two lives saved. But, on the other hand, I do not regard them as at all typical cases of typhoid perforation, but rather as typical of a special class in which perforation occurs after the fever is practically over, and in which the general condition of the patient is otherwise relatively good.

(a) Notes of case read before the Clinical Society of London, December 12th, 1902.

In such patients as these the symptoms of perforation are generally well marked, and the diagnosis is readily arrived at. But in very many other cases the reverse is true; for it not infrequently happens that perforation occurs when the fever is yet high, in patients who are nearly or quite unconscious, in whom there is no perception or expression of pain, and who may have distended tympanitic abdomens before perforation occurs. Many such patients are already at death's door, and in not a few of them, in addition to the perforation, there are, moreover, other areas whose very intestine is so rotten that its giving way is only a question of time.

It is not to be supposed that even if an ulcerated bowel is sutured many such patients soon recover, and in some of them at least the operation of suture may be practically impossible.

I saw at least one such case in South Africa, with Dr. Porth, in which the patient was quite unconscious and manifestly dying. Dr. Porth suspected that there might be a perforation, but as the symptoms were not clear no operation was undertaken, and the same day the man died. A post-mortem examination showed that the intestine was so matted and adherent to the omentum and mesentery that even after death it could with difficulty be unravelled, and though there was a perforation I do not think that it would have been discovered by operation, even if the patient's condition had permitted one to be performed.

As surgeons we are, of course, entirely dependent on physicians for the opportunity of operating on cases of perforation in typhoid fever, and it is evident that it is for us to convince them that operation may save life. The case I have recorded is one in which the saving of life was primarily due to Dr. Norman Moore, and in recording it I do not wish to suggest that all cases are likely to be so successful. On the other hand, I do think that in the present position of intestinal surgery there is good reason to advocate that the chance given by operation should not be withheld in any case of perforation, and I would suggest that in all such cases where perforation is suspected a surgeon should be called in as promptly as possible.

Transactions of Societies.

CLINICAL SOCIETY OF LONDON.

Meeting held Friday, December 12th, 1902.

Mr. A. Barker, F.R.C.S., Vice-President, in the Chair.

Mr. **Stephen Paget** read a paper on

TWENTY-FIVE CASES OF SUNKEN NOSE TREATED BY THE SUBCUTANEOUS INJECTION OF PARAFFIN (FOUR PATIENTS SHOWN AFTER OPERATION.)

Of the whole number of cases, eight were women and seventeen were men; the youngest was 19, and the eldest was 52. In many cases the nose had been deformed for very many years, and, in one case, for half a century. In his earlier cases Mr. Paget had used Eckstein's paraffin, but he was quite certain that it had obvious disadvantages and no advantage of any sort or kind over a paraffin melting 25° or 30° lower. The right melting point for nose cases, was between 108° and 115°, and he was using now a paraffin melting at 111°. Of many syringes that he had tried, the best was Eckstein's syringe; it kept its heat well, it could be easily worked with one hand, and it had a screw-nut on the piston, which prevented any possibility of a sudden running-in of paraffin; but it ought to have a short and strong steel needle. He thought it wrong to attempt to raise the skin, before injection, with a tenotomy-knife; but, if there had been exfoliation of bone, so that there was a depressed and adherent cicatrix, it might be advisable to free the skin at this one point. He drew attention to various details of procedure, and emphasised the fact that every paraffin, when it sets, shrinks; and the paraffin that sets the hardest shrinks the most. This inevitable shrinkage might be so slight as to be hardly visible; but, in many cases, it involved the addition, about a week later, of a few more drops of paraffin; this was done under cocaine. He had no disaster or calamity of any kind to confess, and he believed that in these nose cases there was practically not the very least risk of embolism. The results, taken all together, were very good: and it was easy, in nine cases out of ten, to achieve a vast improvement, and, in many cases, to alter the whole look of the face. It was not possible to make perfect Greek noses; in some, the face was short and small and square, and there was no room for a Greek nose; in some the nose was so shrunken by syphilis, and the upper lip so elongated, that complete success was impossible; in some, the end of the nose was coarse and clumsy, with thickened skin, and this could not be altered. But, short of perfection, an immense amount of good could be done. The skin between the eyes could be so raised and moulded that a fairly good-looking upper part of the nose could be made, improving the whole character of the face and the look of the eyes; the nose could be slightly lengthened, both in its real length and in its apparent length; and the tip of the nose could be depressed, so that the nostrils looked more directly downward. No two cases were alike; he had that day done two cases, which looked almost exactly alike, but in one of them he had failed to do much good; in the other it was perfectly easy in a few minutes to make a very fair good-looking nose. A nose that had been absolutely flat and ape-like for many years might be made at least unnoticeable, so that it should not distress and hinder a man all through life.

Dr. **Scanes Spicer** said he had seen some of the author's cases, and he congratulated him on the results he had obtained. He related two cases of his own in which he had employed this procedure and showed models. He had used paraffin with a melting point of 114° F., and in one case the eyelids subsequently became œdematous and presented hard nodules, and finally the left palpebral fissure became closed. With the assistance of Mr. Juler the masses were dissected out, and were found to consist of scales of paraffin deposited in the fibrous tissue. He remarked that the use of paraffin melting at a temperature of 136°F. would probably be found more satisfactory.

Mr. **Stephen Paget**, in reply, remarked that the melting point was a matter of importance, because if it were too high actual burning of the tissues would be caused.

Dr. **Walter Carr** and Mr. **Edmund Roughton** on a case of

TYPHOID FEVER; PERFORATION DURING A RELAPSE; LAPAROTOMY; DEATH ON THE THIRD DAY FROM A SECOND PERFORATION.

A girl, æt. 18, was admitted to the Royal Free Hospital on October 7th, 1902, on the ninth or tenth day of an attack of typhoid fever. The disease was of a severe type, both the local and the constitutional symptoms being well marked. At the end of the third week there was a small intestinal hæmorrhage. An intercurrent relapse commenced at the end of the fourth week, so that the temperature was never normal for the whole twenty-four hours, and at the end of the fifth week fresh spots appeared. On November 6th, about the fortieth day of the disease, well-marked signs of perforation developed, and an hour later the abdomen was opened an inch to the right of the middle line. A perforation, about one-sixteenth of an inch in diameter, was at once found and closed by a double row of Lembert's sutures. As there was very little fæcal extravasation, the soiled intestine was merely sponged with plain gauze, no washing out nor irrigation used, and no drainage employed. The operation only occupied nineteen minutes. Patient rallied well and progressed favourably for about sixty hours, then symptoms of perforation again developed and death followed three hours later. At the autopsy the first perforation was found to be firmly closed and there was no peritonitis round it, but a second and recent perforation was discovered a few inches lower down and was evidently the cause of death. The conditions which favoured the comparative success of the operation for the first perforation were discussed, viz., its early performance, the small size of the perforation, and the ease with which it was found and closed, so that the operation was a very short one. The chances of a second perforation were considered, the risk of this being probably considerable when perforation occurs during the acute stage of the fever. It was pointed out that whilst seven cases in all had been recorded in the United Kingdom of recovery after operation for perforated typhoid ulcer, all the patients were either convalescent or else suffering from a very mild form of the disease, and that so far not a single successful operation had been recorded in cases of a severe type, or whilst the patient was still seriously ill, although it was under such circumstances that the majority of perforations in typhoid fever probably occurred.

FIVE CASES OF PERFORATION OF THE INTESTINE IN ENTERIC FEVER TREATED BY OPERATION.

Mr. H. J. Waring gave a clinical account of five patients upon whom he had operated during the past four years for intestinal perforation during the course of enteric fever. The most noteworthy points in connection with this series of cases were discussed as follows :—

(a) *The seat and character of the perforation.*—In four of the cases the perforation was situated in the lower twelve inches of the ileum (4, 5, 12, and 14 inches respectively), and in the fifth case in the lower part of the sigmoid flexure sixteen inches above the anal margin. Two of the cases had a double perforation, and in each of these the perforations were close together. This observation, he stated, was in agreement with other statements which have been made on the subject. On this account he advised that when an operation is performed the lower one or two feet of the ileum should be first examined, next the region of the cæcum, vermiform appendix and the ascending colon, and then the sigmoid flexure. As regards the method of suturing the perforation he used in all cases fine silk, each suture being introduced by Lembert's method. Catgut was not considered to be suitable, on account of its thickness and the short time that elapsed before it was absorbed. Careful suturing was advocated on account of the possibility of perforating another ulcer in the region of the sutures. This accident had occurred in one of the recorded cases. Excision of the margins of the perforated ulcer was not advised on account of the probability of invading other ulcers and also on account of the extra time required for the operation and the increased shock to the patient. (b) *The most suitable period for operation.*—The time of operation in the recorded cases was 6, 8, 9½, 30, and 38 hours after the occurrence of the perforation, as judged from the clinical histories of the cases. The patients who recovered were those operated upon at the eighth and ninth hour, the others being fatal. He strongly advocated the performance of an operation as soon as it could be carried out after the perforation had been diagnosed, and considered that the earlier the operation is performed the greater are the chances of the patient's recovery. When time is lost in making a diagnosis, or in obtaining the services of a surgeon, the greater are the probabilities of the establishment of acute peritonitis. Four of the recorded cases undoubtedly had acute peritonitis in the recto-vesical pouch and the adjacent portion of the peritoneum at the time of operation; three of these died, one recovered. In the fifth case the coil of intestine which had perforated was adherent to a portion of the great omentum and the deep aspect of the anterior abdominal wall. This patient recovered. (c) *The period of the disease at which the perforation takes place.*—He stated that published accounts of cases seem to show that the later the stage of the disease, the greater the chances of recovery. He considered that success depended upon the early performance of the operation, the general condition of the patient at the time of perforation and the effects the disease had produced upon his vitality. In the recorded cases perforation occurred on the fourteenth and forty-second days in the successful ones, and the twenty-first and twenty-third in those which were fatal. As regards the fatal results in two cases he considered that the period of operation (thirtieth and thirty-eighth hour) was the main factor, and in the remaining one the severe form of the primary disease.

Mr. Anthony Bowlby related "A Second Case of Successful Operation for Perforation in Typhoid Fever," which will be found on page 652.

Dr. Norman Moore pointed out that the great difficulty in these cases was that of deciding whether perforation had actually occurred. He related the case of a boy in hospital, supposed to be in the fourth week of an attack of typhoid fever, who suddenly complained of great pain on the left side of the abdomen. As this did not improve in the course of an hour he was operated upon, *i.e.*, within two hours of the onset of the acute symptoms. In another case the patient had a colic-like attack of pain with symptoms of collapse at eleven o'clock and he was operated upon at two and recovered. He insisted upon the fact that to make the diagnosis in these cases it was necessary to observe the patient closely for some time, taking care not to be led away by a first impression.

Dr. F. de Havilland Hall related the case of a lad, æt. 16, with a severe primary attack of typhoid fever, who was seized with pain and vomiting, which he attributed to an attack of influenza in the gastric form, other patients in the ward subsequently developing similar symptoms. In this case the abdomen was throughout very tympanitic, which masked the liver dulness, so he decided not to operate. The patient died, and on post-mortem it was found that one ulcer had perforated but there were three or four others on the point of perforating. He said he brought forward this case to illustrate one of the difficulties of diagnosis.

Dr. Goodall concurred in the view that the great difficulty was to make up one's mind whether perforation had actually taken place, and he raised the question whether they would be justified in having recourse to laparotomy when there was only a suspicion of perforation, a point which had been discussed by Dr. Osler on various occasions. He advocated incision in the middle line, because the perforation might not be in the usual spot, and, moreover, other complications, such as perforation of the gall-bladder, &c., might be met with. Their experience at the Metropolitan Asylums Board hospitals had not been favourable. He asked what their opinion should be as to giving opium in these cases. He mentioned that in sixteen cases which had been published, with only one recovery, this was one in which the peritonitis was localised, while in the others it was general. He pointed out that perforation seldom occurred before the third week, and in both of Mr. Bowlby's cases the patient was practically convalescent.

Dr. Owen Fowler said that post-mortem experience showed that when perforation occurred in the active acute stage only one ulcer might have perforated, but several others were on the point of giving way. Probably operations undertaken in the early stages of the disease tended to bring the operation into discredit. Later, if an ulcer ruptured, laparotomy might save life. These cases were almost of necessity hospital cases, because in private practice there was so much delay that little chance was afforded of saving the patient.

Sir Richard Douglas Powell, Bart., pointed out that in many of these cases there was more than one perforation. He agreed that perforation occurred most frequently after the third week, at which time all the ulcers likely to perforate were pretty much in the same stage. If in a case with a high temperature there was a sudden fall, with pain and distension of the abdomen, loss of liver dulness and collapse, running pulse, sweating, cold extremities, &c., there could be little doubt as to the diagnosis, although no one sign would perhaps be sufficient. He pointed out that the operation would often relieve the patient by abating the extreme abdominal distension which was causing reflex paralysis of the heart. He referred to a case of Dr. Sayer's, of Ampthill Square, N.W.; that of a man who had been ailing for a month although he continued to get about. One day he was suddenly seized with a high temperature, and on the third day after that he had severe pain in the lower abdomen with symptoms of collapse, not attended by any abdominal distension. When he saw the man some hours later he was markedly collapsed and no improvement had taken place on the following morning, and soon after he died. Post mortem, they found a large perforation in the ileum and two other minute perforations elsewhere, so that an operation in this case would have been useless.

Dr. A. E. **Russell** said that at St. Thomas's they had had three cases of successful laparotomy for perforation in typhoid fever. The first was in a patient suffering from a second relapse, the second a man, æt. 21, in a first relapse. In this case so much relief was afforded by drawing off his water that a positive diagnosis was not arrived at until the following morning, when Mr. Battle operated over the seat of pain and came at once upon the perforation. He pointed out that absence of liver dulness in a contracted abdomen was a significant sign of perforation.

Dr. **Sydney Phillips** referred to several cases in which, in the course of post-mortem examinations, healing perforations had been seen. In none of these had the lesion been diagnosed during life. One difficulty in the diagnosis was that perforation sometimes gave rise practically to no symptoms at all, or but of the slightest, and, on the other hand, symptoms suggesting perforation might be brought about by quite other causes, and he referred to a case related before the Royal Medical and Chirurgical Society, in which all the symptoms of perforation were present, yet on operation no perforation was discovered, the patient recovering nevertheless. He did not think they would be justified in operating on mere suspicion, although much would depend on who suspected it. His own experience did not bear out the view that perforation usually occurred so late in the disease, and in these cases it would be interesting to know what had been the diet and the treatment. He pointed out that perforation was often preceded by pain in the abdomen, and assistance might be derived from the bell sound over the whole of the abdomen as showing the presence of free air. In the only two cases in which he had advised operation they had not been successful.

Mr. F. C. **Wallis** said a friend had told him that at Freiburg they were in the habit, in suspected cases of perforation, of flushing out the peritoneum with normal saline solution.

Dr. H. J. **Curtis** advocated laparotomy under local anæsthesia and drainage in suspected cases of perforation.

Mr. **Bowlby**, in reply, thought that where there was reasonable probability of perforation they ought to operate. The majority of those in whom perforation occurred were in a condition to support the operation, which, after all, was by no means a severe one.

Mr. **Waring**, in reply, said he had seen a person supposed to be suffering from perforation turn out to be suffering from appendicitis, while in another case a lad who was suffering from abdominal symptoms, attributed to his having been run over, proved to be suffering from typhoid fever.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Pathology.

Meeting held December 5th, 1902.

E. J. **McWeeney**, M.D., President, in the Chair.

Dr. **Earl** showed a case of

SARCOMA OF THE LEFT SUPRARENAL CAPSULE,

with secondary growth in thorax, involving the right lung, the pericardium, and right auricle, and causing narrowing and thrombosis of the superior vena cava.

The **President** wished to know whether the material found inside the superior vena cava was in the nature of a thrombus, and if so whether Dr. Earl regarded it as an embolus or as something which grew from the ung and auricle into and through the walls of the vein, *i.e.*, whether it was a thrombus due to loss of vitality, or to growth of the tumour? He said it would be interesting to study the relations of the tumour to the walls of the vein and of the auricle, as to whether it infiltrated these structures or not.

Dr. **Earl**, in replying, said that he looked upon the material as an ordinary thrombus, due to slowing of the circulation and infiltration of the vein walls. He made no microscopic examination of it, but it was partly white, partly red, and probably did not contain any tumour tissue.

Drs. **Maunsell** and **Earl** showed a case of

CANCER OF THE TRANSVERSE COLON.

There was a small polypus in the neighbourhood of the tumour, which presented histological characters which appeared to indicate malignancy.

Professor **O'Sullivan** said he was inclined to regard the polypus as an adenomatous growth due to irritation of the malignant growth. He had seen a case in which there was a row of these lying round the cancer.

The **President** said it would be interesting to find two malignant tumours existing independently of each other, for example in the bowel. If he had seen the specimen without previous knowledge of it he would have thought it more than a simple tumour. He thought it was a cancer of the bowel in its very initial stage.

Dr. **Earl**, in replying, agreed that if it was malignant it was a very early stage. Dr. O'Sullivan had mentioned a case in which there was a ring of these growths round a cancer, and that he considered them innocent, but he might as well have considered them malignant if they had a structure similar to that he showed to-night. He said that two independent malignant processes did sometimes occur; there might be a cancerous tumour on one wall of the œsophagus and another on the other wall with healthy tissue between. The question of the changes of cells was of most importance in connection with curettings of the uterus. Though the structure of the mucous membrane of the intestine was not the same as that of the uterus, the same general laws held good.

Dr. **Earl** showed a case of

DROPSY OF THE GALL-BLADDER

due to obstruction of cystic duct by a gall-stone.

Mr. **Arthur Benson** read the notes of a case of

INTRA-OCULAR TUMOUR

which occurred in the left eye of a child, æt. 3. Six months before admission to St. Mark's Ophthalmic Hospital the creamy white reflex from the pupil was noticed, but there was no pain apparently. On admission the cornea and lens were perfectly clear, the iris was discoloured and vascular, with numerous vessels visible on its surface. The vitreous chamber was completely filled by a creamy coloured tumour which had moulded itself against the posterior surface of the lens. The tension of the eye was · + 2; this, added to the appearances, made the diagnosis of pseudo glioma very improbable, whilst the age of the child was against sarcoma of the choroid, so that glioma of the retina was the most probable diagnosis. Enucleation was done and the globe examined by Dr. Neville, who reported as follows:—"On microscopical examination the tumour shows the characters of a round-celled sarcoma, of a markedly cylindromatous type. The tumour-cells form well-marked sheaths for many of the vessels, in the neighbourhood of which the cells are both larger and stain better than they do outside the range of immediate nutritive supply. There are areas of hæmorrhage, and also semi-necrosis, where nuclei stain feebly, and scattered through the mass are many areas of calcification, some smaller vessels having completely calcareous coats. Examined unstained the cells do not show any abnormal pigmentation. Mallory's glia-stain fails to show any gliomatous structure, and the sections so far made do not help to solve the question of the origin of the tumour. The remaining part of the tumour is being decalcified."

The **President** fully agreed in not giving the name glioma to this tumour. In most of these cases of intra ocular tumour springing from the retina, the characteristic spider cells were not seen, even in staining by the Golgi method. True glioma of the retina was very rare. He had heard of a case of a child, æt. 4, who was attacked by this disease in both eyes, and from each of them there was a tumour projecting as large as a closed fist of an adult.

Dr. **EARL** could not agree with Drs. McWeeney and Neville in calling these growths sarcomata. They could be traced to the retina itself, and our ordinary view of sarcomata was that they were connective tissue growths, while there was very little of this tissue in the retina. Again, in ordinary glioma of the brain the spider cells were not found with any readiness, and the growths there also frequently resembled sarcomata. He considered neuro-epithelioma the best term for such tumours as Mr. Benson showed.

Professor **O'SULLIVAN** said that the tumour seemed to consist of two parts, one surrounding the vessels and consisting of large cells, and the other consisting of small round-cells corresponding in appearance to those found in what is called glioma of the retina. He did not see why these tumours should be called gliomata, considering they were derived from the inner molecular layer of the retina. The different characters of the two parts of this tumour seemed to him to make the diagnosis unusually complicated and difficult.

The **PRESIDENT** said there were certainly two kinds of cells of different sizes in the tumour, one with large nuclei packed close together and little protoplasm, the other with very small nuclei and no protoplasm. The nomenclature of these tumours was very unsatisfactory. There were two standpoints to consider them from; the morphological and the histogenetic. Morphologically these tumours were to be classed with small, round-celled sarcomata. Histogenetically they might belong to the epithelial class of tumours. Whether they originated from epiblastic sources was open to discussion. Supposing those cells were of epithelial origin, morphologically they did not resemble epitheliomata; they were sarcomata.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

CLINICAL MEETING.

MEETING HELD DEC. 5TH.

MR. C. B. KEETLEY showed a patient who had been sent into hospital three weeks ago with a rupture of the ligamentum patellæ. The patient was a middle-aged man. Five weeks had passed since the accident. The ruptured ends were brought together with silkworm gut. A piece of stout silver wire was inserted through the patella and the tubercle of the tibia, as a temporary ligamentum patellæ. At present, three weeks after the operation, the patient can walk and extend the knee painlessly. The silver wire would be removed in two or three months.

Dr. **CLIPPINGDALE** wished to know whether, in passing the wire, Mr. Keetley was able to keep outside the cavity of the knee-joint.

Mr. **GARRY SIMPSON** showed: 1. A child, in apparently good health, who last summer suffered from no less than eighty-five tuberculous abscesses of the skin. The deposits under the skin were about the size of the kernel of a hazel-nut. The nodules were scraped out with a Volkmann's spoon; the only other treatment was open air and good food. 2. A man who had recovered from tetanus. A rusty nail perforated the sole of his foot for about one inch. The wound was irrigated with 1 in 1,000 perchloride solution; but fourteen days after the injury the man developed tetanus. Mr. Bidwell injected anti-tetanic serum into the posterior portions of each second frontal convolution. Mr. Garry Simpson suggested that in such cases serum should be injected immediately after the injury without waiting for symptoms of tetanus, and that oxygen should be forced into the wound. 3. A child who had got its tongue between the cog-wheels of a clockwork engine. With the assistance of a plumber the machine was unsoldered and the tongue released. The portion of the tongue caught in the cog-wheels subsequently sloughed. 4. A patient who, in falling from a pear tree, ran a piece of wood for some inches under his scalp. By means of antiseptic precautions, drainage, and free oxygen to the wound, a complete cure resulted in a few days.

Dr. **CLIPPINGDALE** said that in the child with multiple abscesses, in addition to the suggestions of tubercle, syphilis, or pus infection, farcy might be a possible cause.

Mr. **ATKINSON** doubted if the case were one of tubercle.

Dr. **WHITFIELD** agreed with the diagnosis of tuberculosis. The tuberculides probably arose as bacillary emboli from some central focus. These emboli were probably either bacilli of extremely low virulence or dead bacilli. This would account for the mildness of the symptoms, and the negative result of inoculation experiments. Probably the child has had, or still has, a tuberculous focus, possibly in the bronchial or mesenteric glands.

Mr. **KEETLEY** suggested, with reference to the case of tetanus, that all punctured wounds, with the possibility of infection by tetanus, should be opened up and disinfected in some such way as that suggested by Dr. Garry Simpson.

Dr. **SEYMOUR TAYLOR** showed two cases of mitral stenosis, accompanied in each instance by mitral regurgitation. The first patient, a smith, æt. 40, had had rheumatic fever. The murmur occupied the middle third of the diastolic period, and was limited to the site of the apex beat. In this case the administration of digitalis was followed by good results, the drug being specially indicated by the irregular pulse and the existence of chronic bronchitis. In the second patient, a clerk, æt. 25, who had been an athlete, there was no history of previous acute rheumatism. The murmur occupied the late diastolic period (presystolic). Great improvement resulted from rest without digitalis or other cardiac tonics.

Dr. **WHITFIELD** showed a woman, æt. 36, with a symmetrical scarring eruption over the deltoid region in both arms. The disease commenced twenty years ago, with no history of injury. There were one or two similar smaller patches on the right buttock. The smaller patches were simply white atrophic spots on the skin, and were said by the patient to constitute the early lesion. The older patches consisted of a band of white atrophic skin surrounded at either end by smooth red infiltration. This showed no claw-like processes. Microscopically, a small piece of this margin showed a formation of new fibrous tissue in the middle of the corium, not affecting the papillary layer, and containing practically no elastic fibres. Dr. Whitfield believed the disease to be an unusual form of sclerodermia, but others regarded the case as one of keloid. However, the scar formed after excising the piece of infiltrated edge showed no sign of becoming keloidal.

Mr. **PATON** showed a woman, æt. 58, who was operated on in September of this year for chronic intestinal obstruction associated with considerable loss of weight. An incision in the middle line of the abdomen revealed many omental adhesions, but on separating these a small annular constriction was found at the splenic flexure of the colon. A second incision was made immediately over this, 3 in. of the gut were excised, and the divided ends were united by two continuous sutures. The abdominal wounds were completely closed, except for a small gauze drain. The patient recovered without any trouble, except a diarrhœa, which was very difficult to stop. She has since almost regained her normal health, and has put on nearly a stone and a half in weight.

Dr. **A. E. RUSSELL** showed: 1. A case of syringomyelia of the cervical and upper dorsal regions of the cord. The patient was a joiner, æt. 50. He had well-marked neurotrophic arthropathy of the left wrist and carpal joints; also creaking of the shoulders. In addition, there was typical dissociative anæsthesia of both hands and arms, neck, scalp, and trunk, down to the fifth thoracic segment. Tactile sensation was intact, but painful stimuli and heat and cold were not appreciated. There was also considerable atrophy of the intrinsic muscles of the right hand. The knee-jerks were greatly accentuated. The combination of muscular atrophy, dissociative anæsthesia, and trophic joint lesion presented a complete picture of syringomyelia. 2. A man, æt. 34, who contracted syphilis ten years ago. Five years ago he suffered from gastric crises; after eighteen months these were succeeded by weakness of the legs. He also had laryngeal crises, lightning pains in upper and lower limbs, and marked ataxia of arms and legs. He had been treated by Mr. McAdam Eccles for an enormously distended bladder and urethral stricture. The chief feature in the case was the marked muscular atrophy in the whole of the lower limbs. This is a rare phenomenon in tabes dorsalis. Probably the condition was due to atrophy of the cells in the anterior cornua, for there was practically no sensory disturbance such as might be expected if the lesion were one of the peripheral nerves.

With regard to the case of tabes dorsalis, Dr. **Seymour Taylor** thought that there must be some predisposing factor besides syphilis. The disease is comparatively rare in women. In his opinion the man who indulged in excessive sexual excitement, if he contracted syphilis was likely to become the victim of locomotor ataxia.

Dr. **Mallam** asked for suggestions as to the treatment of tabes dorsalis, and also wished to know the cause of the excessive muscular wasting in the patient shown.

Mr. **Atkinson** agreed with Dr. Seymour Taylor as to the twofold cause of the disease.

Mr. **Armour** pointed out the entire loss of sexual desire on the part of the sufferer from tabes.

Mr. **Lloyd** asked for Dr. Russell's opinion on injury as a cause of tabes dorsalis.

THE LARYNGOLOGICAL SOCIETY OF LONDON.

Meeting held Friday, Dec. 5th.

The President, **Mr. E. Cresswell Baber**, F.R.C.S., in the Chair.

Mr. W. H. R. **Stewart** showed a case of nasal deformity, and one of strumous ulcers of mouth and tongue.

Mr. F. J. **Steward** showed a specimen of malformation of the œsophagus, obtained from an infant five days old. The child had been quite unable to swallow, milk being regurgitated after five minutes. There was complete obstruction five inches from the gums. The specimen showed dilatation of the upper portion of the œsophagus which ended in a blind extremity about an inch above the bifurcation of the trachea. The lower portion of the œsophagus communicated at its upper end with the trachea.

Mr. **Hunter Tod** showed a case of laryngitis hypertrophica in a girl, æt. 21, following prolonged nasal trouble.

Dr. **Scanes Spicer** gave a lantern demonstration on some recent investigations on the normal fluctuations of air pressure in the upper respiratory tract and the effect on these fluctuations of nasal obstruction artificially produced. He suggested that a naturally wide rima with the consequent diminution of normal pressure fluctuations and lessened rhythmical stimulus to circulation in the blood-vessels, and so lessened nutrition of the walls, was the explanation of the origin of atrophic rhinitis.

Dr. **Logan Turner** showed a new series of anatomical preparations demonstrating the artificial production of œdema of the larynx. Injection of carmine gelatine had been made into the loose submucous tissues under varying amounts of pressure; the consequent swellings closely simulated the conditions met with clinically in œdema. He also showed a case of abnormal narrowing of the larynx and trachea, probably congenital in origin. The epiglottis was of infantile type, and the whole upper laryngeal aperture was considerably narrowed and the trachea flattened from side to side throughout its entire length. Dr. Logan Turner further showed a specimen of malignant stricture of the upper end of the œsophagus from a woman, æt. 58.

Dr **Herbert Tilley** showed a case of advanced epithelioma of the epiglottis, with secondary infection of the cervical glands, with the object of illustrating the relief obtained by removal of the primary growth through the mouth. Attacks of dyspnœa and extreme difficulty in swallowing were the chief symptoms. A radical operation was evidently quite out of the question, but Dr. Tilley had removed the primary growth at several sittings by means of Krause's and Watson Williams' cutting forceps. The relief of the symptoms had been extraordinary.

Dr. **Wyatt Wingrave** showed a case of laryngeal growths in a man, æt. 50, which had been previously shown to the Society last April, when no definite diagnosis was arrived at. The symptoms had improved, but the growths had distinctly increased in size.

Dr. **Dundas Grant** showed a case of paralysis of the abductors of the vocal cords in a youth shown at the last meeting. He thought there was some improvement in the paralysis of the abductors. Dr. Grant also showed a case of comparative hemi-anæsthesia in a young female with subjective nasal obstruction on the affected side. In the discussion which followed, some doubt was expressed as to whether there was not real nasal obstruction due to collapse of the ala. Dr. Grant further showed a case of increasing dysphagia of six months' duration in a middle-aged man, probably due to pharyngeal epithelioma. On examination, a growth could be seen projecting from the wall of the pharynx, and hiding the posterior part of the ary-epiglottic folds. The patient had been on iodide of potassium with subjective relief, but no visible change in the growth.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

Meeting held at Sheffield, November 21st, 1902.

Dr. S. Buckley, President, in the Chair.

PRIMARY TUBERCULOSIS OF THE OVARY.

Dr. J. E Gemmell (Liverpool) related the case of a woman, æt. 26, married two and a half years previously, but sterile. Three months after marriage she was treated for pelvic peritonitis which left some thickening on the right side of the pelvis. Three months ago the cervix was dilated, and the uterus curetted with a view to relieving the dysmenorrhœa and sterility, and at that time only a little thickening was detected on the right side, although the patient had complained of pain on this side for some time. Menstruation had been regular but painful, the loss being normal in amount. Dr. Gemmell examined the patient under an anæsthetic and found the uterus fixed. The right ovary, enlarged to the size of a fist, was hard and fixed. The left appendages felt small and adherent to the pelvis. The diagnosis lay between an adherent solid ovarian tumour and a tubo ovarian abscess. The abdomen was opened. The omentum was adherent to the abdominal wall, and the coils of intestine were matted together and adherent to the tumour. The latter also adhered to the back of the broad ligament. In removing the tumour its wall was torn, and fœtid, thick, curdy, jelly-like pus escaped. The left ovary was caseous and disorganised, the tube contained a plug of calcareous material, and its fimbriated end was closed. There were no signs of miliary tubercle on the peritoneum and no pyosalpinx, and there had been no evidences of tubercle in any other part of the body. On examining the specimens the right tube was adherent to the ovary, and the ostium closed. The tube was free from pus. The ovarian stroma was riddled with foci of suppuration. The pus contained putrefactive organisms and staphylococci, but no streptococci, gonococci or tubercle bacilli were detected. Microscopical sections showed well-marked giant-celled systems. The disease being localised to the ovary and fimbriated end of the tube only suggested the probability of the disease being a primary ovarian tuberculosis.

Mr. R. **Favell** (Sheffield) described a case of "Cæsarean Section for Labour Obstructed by an Ovarian Dermoid." The patient, æt. 35, was in her sixth pregnancy. Mr. Favell detected the tumour four years ago, but the patient declined operation. Two years later the fifth labour took place, and was terminated by version, the doctor in attendance having difficulty with the tumour. The sixth labour coming on, the doctor found the tumour had increased and sent the woman to Mr. Favell at the Jessop Hospital. The tumour was found tense and bulging, and occupying the pelvis. The abdomen was opened, and as the tumour was fixed by dense adhesions in Douglas's pouch, Cæsarean section was first performed and then the tumour removed. The child was living, and the mother made a good recovery. The cyst contained much hair and sebaceous material.

Dr. W. **Walter** (Manchester) gave particulars of a case of "Ovariotomy performed on a patient who was four months pregnant." The cyst was the size of an ostrich's egg, and had a fairly long pedicle, which was twisted once, but which had caused no evidence of strangulation. The pedicle was secured as far as possible from the uterus in order to lessen the danger of abortion. The patient did well and the pregnancy went to full term.

Specimens, Etc.

Dr. **Sinclair White** (Sheffield) showed: 1. A large fibroid uterus removed by pan-hysterectomy from a patient, æt. 39, who had suffered for four years from profuse menorrhagia. 2. An ovarian fibroma weighing seven pounds from a patient, æt. 45. The adhesions were universal, and a small portion of intestine required resection. 3. A Fallopian tube removed from the sac of an irreducible femoral hernia. 4. An unruptured tubal gestation removed from a young woman who was thought to be suffering from appendicitis. Recent peritonitis was noted around the sac. 5. A uterus containing a six weeks pregnancy, and a large, soft, rapidly-growing fibroid. The fibroid closely resembled an interstitial pregnancy at the time of operation. All the patients recovered.

Dr. W. **Walter** (Manchester) showed a "Uterus and Occluded Tubes" removed per vaginam from a patient suffering from pelvic peritonitis. Owing to dense adhesions complete removal of the ovaries was impossible. Hysterectomy was therefore performed, as being less dangerous in this particular case than persistent efforts at completing a double oöphorectomy.

Mr. R. **Favell** (Sheffield) showed large "Fibroid Polypus of the Uterus weighing three pounds eleven ounces," which had become extruded from the vagina the day before its removal. The pedicle was long, and there was no inversion of the uterus. The perineum was not injured.

The cases and specimens were discussed by the President (Dr. Buckley), Drs. Lloyd Roberts, A. Donald, J. E. Gemmell, W. Walter, R. Favell, and E. O. Croft.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

Meeting held November 20th, 1902.

The President, **Dr. John Robertson**, in the Chair.

Dr. D. Burgess showed a case of "Disseminated Sclerosis."

Mr. R. **Favell** related a case of "Cholecystotomy."

Mr. **Arthur Connell** showed the following cases:—

A baby.—Amputation of sacral teraboma six days after birth owing to the most dependent part becoming exceedingly thin, and on the point of ulceration, very broad base. Contained a small portion of bone, a section of which was shown and found to be of the Haversian type.

M. L., æt. 46.—Recurrent inoperable scirrhus carcinoma of left breast. Primary growth removed six years ago. Recurrence last year, two large tumours, one situated at sternal end of clavicle, the other partly over sternum, and involving second interspace, with considerable œdema of the arm. On August 25th, double oöphorectomy was performed, and six weeks later shrinking began in the tumours, and with it the rapid disappearance of pain and œdema. Patient now free from pain and sleeping well. Is having thyroid feeding.

W. M.—Ruptured duodenal ulcer, with subsequent gastro-jejunostomy (already reported in the *Lancet*, September 6th).

W. L., æt. 16.—Ruptured ilium, from a fall on to the kerbstone, striking theabdomen. Patient seen by me twenty-four hours after the accident, and immediately operated upon. Wound in gut easily found on right side, owing to relative dulness on that side. Operation October 11th, 1901. Patient working in a coal pit again.

Dr. **Arthur Hall** showed: 1. A case of folliculitis of both legs, due to frequent salivation of the trousers by oil during the course of his work, the so-called oil acne; 2. A case of dermatitis artefacta in a young girl, simulating a patch of ringworm on the right forearm. Since completely protecting the patch by zinc gelatine, two new patches have appeared on the leg.

Mr. **Snell** introduced a young woman whom he had treated for severe ectropion of the upper eyelid by transplantation of a large graft. The portion transplanted was taken from another patient's eyelid who was under treatment at the same time for superabundant folds in the eyelid which were occasioning ptosis. The graft measured 1½ ins. long by ¾ in. wide. Most of it had lived and the result was excellent.

Dr. Gwynne read a paper on the treatment of certain cases of "Infantile Paralysis by Arthrodesis." He illustrated the value of the treatment by the notice of two cases thus treated, both with excellent results. One was a case of paralysis of right leg involving all the muscles that control the knee and ankle; the other was a case of calcaneo-valgus of a severe type. The patients were both able to walk without the aid of any support or stick, and their appearance did not suggest any deformity beyond the stiffness incidental to the treatment. He claimed a more extended use of this method of treatment.

Dr. **Seeley** read a paper on the

DIETING OF TYPHOID.

1. The ideal conditions of hospital do not exist in private practice, especially among poorer classes. Strict dieting cannot therefore be, and is not, adhered to. 2. The mortality in private practice is less than that of hospital (Osler gives 8½ per cent. for former to 13½ per cent. for latter). 3. Typhoid (the word "enteric" ought not to be employed) is not a local disease of intestine, but may occur without marked, or even any, intestinal lesion whatever. 4. The majority of cases are mild, of no more account than scarlatina or measles (perhaps the type of typhoid is changing and becoming milder). 5. Perforation and relapse are the results of the typhoid process. There is not one particle of evidence to show they are due to giving solid food. 6. As the result of giving good nourishing food patient's condition is more satisfactory and convalescence shortened.

CORK MEDICAL AND SURGICAL SOCIETY.

Meeting held Wednesday, December 10th, 1902.

Dr. J. Cotter, Vice-President, in the Chair.

Case of Excision of Cæcum for Carcinomatous Growth.—Dr. T. **Gelston Atkins** showed a man, æt. 32, on whom he had performed excision of the cæcum and the adjacent portions of the large and small intestines for a carcinomatous growth. The patient had lost a good deal of flesh for the preceding four or five months, and a hard tumour about seven inches long and four inches broad could be detected in the right lumbar region, extending into the umbilical, hypogastric, and right iliac regions. Having cut down on the tumour, he clamped the adjacent portions of the bowel, removed the entire mass, invaginated the cut ends of the intestines, and effected a lateral anastomosis between the ileum and the transverse colon. The patient made a rapid recovery from the operation. The growth proved to be of a carcinomatous nature, with a good deal of fibrous tissue between the cancer cells. No enlarged glands could be detected in the abdomen, but, of course, the ultimate prognosis in the case was unfavourable.

Dr. **Henry Hobart** thought a side-to-end anastomosis would effect a saving of time in such an operation.

Dr. **Cotter** was of opinion that the use of Mayo Robson's bobbin in these cases expedited the operation.

Dr. **Atkins**, in reply, said that the sectioning of the mesentery involved in end-to-end and side-to-end anastomoses generally gave rise to a certain amount of hæmorrhage, which he had often found it difficult to completely arrest. Since seeing Doyen repeatedly making use of the lateral form of anastomosis, he had followed that procedure with the best results.

Two Cases of Gastro-Jejunostomy.—Dr. **H. R. Townsend** showed two patients on whom he had performed gastro-jejunostomy. One patient, a female, æt. 25, had suffered from severe ulceration of the stomach from time to time since 1894, and had been under ordinary medical treatment over and over again, with only temporary benefit. The other patient, a man, æt. 27, had an enormously dilated stomach and suffered almost constantly from profuse vomiting. In his case also the ordinary treatment had been followed without success for several years. Several months had elapsed since the operations, and both patients are now able to take all kinds of food, and are free from all symptoms of gastric trouble.

Case of Splenic Anæmia.—Dr. **Norman Townsend** showed a girl, æt. 22, suffering from splenic anæmia. The patient had never menstruated, her mammæ were undeveloped, and there was complete absence of hair under the axillæ and over the pubes. The spleen extended to the middle line in front, and could be felt three inches below the umbilicus. The blood was of the chlorotic type, the deficiency in corpuscles being but slight, while the colour-index was only 0·7. There was no excess of leucocytes.

France.

[from our own correspondent.]

Paris, Dec. 14th, 1902.

Appendicitis.

At the meeting of the Société de Chirurgie, M. Regnier said that he was a partisan of temporisation, which had given him excellent results. Out of seventy-one cases which he treated by expectation, fifty-nine recovered by medical treatment alone, and only two died.

He was absolutely convinced that if the treatment by ice and opium were instituted at the outset, very few grave cases of appendicitis would be observed.

M. Michaux said that out of fifty patients suffering from appendicitis he had seen this year, forty-five were operated, of which thirty-nine in the interval and six during the acute stage. All the former did well, but two of the latter succumbed. Four others were so well satisfied with the medical treatment that they refused an operation. He also became more and more a partisan of expectation and medical treatment (refrigeration).

M. Potherat did not operate after a slight attack nor where the abscess had opened into the intestine, unless there remained behind a certain amount of induration. Beyond these two conditions he operated, but as much as possible in the interval. He was only a partisan of immediate operation when the diagnosis was made at the onset. In his hospital service he had operated during the last two years on 115 cases of appendicitis, of whom seventy-nine were during the period of quiescence and were all successful, and thirty-six during the attack, and of these eleven died.

Beer Yeast.

The properties of yeast as a microbicide in certain eruptive affections such as furonculosis, small-pox, chicken-pox, or erysipelas, are receiving the attention of many therapeutists. Dr. Conche, of Lyons, has published an article on the subject as regards the treatment of small-pox and chicken-pox, and for which he obtained very satisfactory results. Of eight cases, three of whom were small-pox, he remarked that the fever abated rapidly, and the eruption did not come to maturity, consequently there was neither suppuration nor the subsequent formation of boils so frequently observed after these affections. He gave the fresh beer yeast in beer or in some other liquid, masking the taste of the yeast in doses of three tablespoonfuls a day. In six cases of erysipelas of the face Dr. Abouchard administered prepared yeast (dry) in doses of three teaspoonfuls a day and found that under its influence the fever rapidly diminished and the inflammatory zone did not extend. Prof. Maine, of Paris, systematically treats pulmonary affections such as pneumonia in the aged and chronic bronchitis with beer yeast, while Dr. Lardier took it for the subject of his *these*, and in which he proved that in the bronchial catarrh of old people the employment of beer yeast produced a rapid decrease in the expectoration, and finally a complete cure. He tried it also with success in pneumonia after the acute stage had passed. Perhaps the dry form as prepared by chemists is more agreeable to the taste than the fresh yeast; in any case it is quite as efficient.

Germany.

[from our own correspondent.]

Berlin, December 13th, 1902.

At the Society of Charity Physicians Hr. Jolly showed and described four cases of

Tuberculous Disease of the Spinal Cord.

In the first case there was spastic paralysis of both legs from pressure on the cord. In the second case, in which similar symptoms presented, the symptoms had receded in consequence of long-continued treatment by extension so that no trace of disturbance in walking existed any longer. The third case, of a similar nature, was that of a patient who had been affected from her first year of life, in which there was a rachitic curvature this one also, although there had been complete paraplegia could now run well. The speaker remarked that the functional disturbance of the cord did not necessarily correspond to the curvature of the spine. Generally it was not a compression, but an exudation between the dura and the bone, or in the membranes, and changes in the substance of the cord. There was frequently only a collateral œdema, but the affection was often myelitic in its nature, the latter generally in connection with bladder disturbance, with loss of sensibility and mobility. This question, so important in point of prognosis, was often very difficult to answer. The preparation of the fourth case was shown, in which, in spite of flaccid paraplegia of both legs, the patellar reflexes persisted up to the death of the patient. The case was one of tubercle of the substance of the cord, in which, as the retained sensibility showed, some few fibres remained uninjured.

Hr. Köning remarked that pressure paralysis of that kind was rare, but it might take place, and operation was justifiable only in rare cases.

Hr. Jacob observed that in such cases, with extension treatment, recovery was late, but rapid when it did begin.

At the Hufeland Society Hr. Boaz spoke on

CARCINOMA AND DIABETES.

The subject had been extensively discussed in French literature, but far less comprehensively than in German. Griesinger, in 200 cases of diabetes, had not met with an undoubted case of carcinoma. Naunyn admitted the simultaneous occurrence of both diseases, and had collected cures. Cupler had found sixty-eight cases in which carcinoma of the more varied degrees was co existent along with diabetes. The speaker himself since 1896 had observed twelve cases of carcinoma in 366 of diabetes. In seven the disease affected the rectum, two the œsophagus, two the stomach, and one the liver and omentum. All the patients were males. Cupler admitted that the predisposition was less in women than in men.

How long the diabetes existed before the carcinoma was never certain. The period varied between seven months and fifteen years. The amount of sugar was from 1 to 5 per cent. Aceton and acetic acid were met with only once. The youngest patient was thirty-nine and the oldest sixty-five. These cases were operated on. One patient survived the operation, and no complications occurred. Two years had since elapsed, and the patient was still well. The second patient, who still had sugar in the urine, died of diabetic coma a few days after the operation. A third patient died nine months after operation of progressive cachexia.

Views as to the course of carcinoma in diabetes differed widely. Tuffier came to the conclusion that carcinoma in diabetes grew very slowly, as the conditions as to nourishment were so unfavourable. In contrast to this were the views of Cupler, Gilbert, and Weill, who had seen extraordinarily rapid progress of the disease even when conditions as to nourishment were unfavourable. The speaker agreed with these views with this limitation, that there was a difference between the course in active and in passive diabetes. Only in the former case was the course of carcinoma rapid. In the second case the course was extremely slow.

The diabetes was primary and the carcinoma secondary and there was a decided connection between the two. Two classes of cases could be distinguished. In the one, on carcinoma being established, a surprising tolerance of carbohydrates appeared, in other cases the diabetes continued to the end. In the second class also the diabetes appeared to be checked. In some cases the carcinoma was antagonistic to the sugar, in others the formation of sugar continued unchanged. Why this was so did not appear. The relative infrequency of carcinoma in diabetes did not support the prevailing view that carcinoma was due to animal foods.

Operation for carcinoma in diabetics did not come under the general rule as to danger. The only question was, whether a radical operation was practicable, and in spite of the danger of operation, it ought to be advised so long as there was neither nephritis nor cardiac weakness. It had been thought that an extinct diabetes could not be dangerous, but this was an error. A diabetes that had disappeared for a year might be lighted up afresh by operation under chloroform narcosis, and lead to diabetic coma. Hoffa and Landau, among others, had reported such cases.

In case of manifest diabetes no physician could forget the dangers. But even here operation might have good results. Carcinoma patients should have their sugar removed before operating, if this did not take too much time. Operation during acetonuria was naturally more dangerous.

As regarded the treatment of carcinoma-diabetes, each case must be considered individually. It was certain that absolute removal of sugar must not be striven for, as the carcinoma itself would be unfavourably affected by this, and generally the patients were advanced in years, when diabetes was no longer as dangerous.

Austria.

[FROM OUR OWN CORRESPONDENT.]

VIENNA, December 13th, 1902.

ABDOMINAL SPASM.

AT the "Gesellschaft fur innere Medicin" Bum presented a patient, æt. 22, who formerly suffered from severe attacks of abdominal spasm, flexor as well as extensors. About two years ago she suffered from constipation with commencing pain which led in a short time to a kyphotic condition of the body associated with great pain in chest, back, and head. Purgatives of all kinds were employed without effect. It is worthy of note that even after the pains had subsided the muscular spasm persisted, notwithstanding the efforts to engage the attention, or require her to perform some peculiar movement, such as moving backwards on the knees. Percussion of the abdomen revealed a dull area over the descending colon, quite tough and hard, that could not be kneaded, which is often found in characteristic chronic spastic constipation. Bum thinks this the basis of the functional form of atony that leads to habitual spastic constipation. On relieving the spasm with narcotics the constipation was removed and the patient cured. In neurasthenic males a similar state of affairs exist.

HÆMORRHAGIC DIATHESIS.

Reiter showed a young locksmith, æt. 28, who since he was eight years of age suffered at varying periods from pain and swelling of the joints. This phenomenon often appeared without pain or any possible injury, while the joint in both cases was quite movable without any increase of the pain. Sometimes there was fever associated with the swelling, and sometimes there was not. The heart during the attack was unaltered and normal, while the general health seemed always good. While in hospital on one of these occasions his teeth began to bleed profusely and at the same time he became extravasated with large patches under the skin. The history of the family is remarkable for hæmorrhagic attacks. Repeated hæmorrhagic effusions into the joints have so interfered with the movement that the patient cannot bend them sufficiently to carry on his work.

The differential diagnosis was from articular rheumatism and fungoid growths. The former might be discarded as inconsistent with the symptoms, while the latter is supported by experiments which Konig performed with similar symptoms to remove the fungus. No sooner had he opened the swellings in two of the cases than incontrollable hæmorrhage commenced that brought about death within an hour.

In the case related operation has never been contemplated, but rest in bed, with compression and dry warmth has done much to reduce the fungoid growths.

Bullet Lying in Cardiac Wall.

Kienböck showed a patient, æt. 26, who in the beginning of December last year attempted suicide by shooting himself in the right temporal region and heart; the second bullet deviating so that it finally lodged in the posterior cardiac region. Twenty-four hours after the occurrence he recovered from the fainting condition which the first effect of the bullet produced, after which there was a slight rise of temperature with hæmorrhage from the lung, and constant pain in the head. The wound of the head healed up rapidly without any bad symptom. In a short time a systolic murmur appeared, but no effusion into the pleura was observed.

On account of the increasing pain in the head the wound was trephined with the hope of securing the bullet which was ultimately effected.

The condition of the heart up to this time might be described as dulness normal, apex beat in fifth intercostal space within the mamillary line with a broad high systolic area of vibration. There was also a loud, somewhat rough systolic murmuring over the region of the mitral valve which could be heard over the upper part of the heart. The second pulmonary sound was accentuated, and with the rays, and turning the patient half round the bullet could be observed on deep inspiration in the posterior wall of the heart about two centimetres above the diaphragm and in front of the spinal column. The bullet was moved regularly synchronously with the movement of the right half of the heart opposite the ninth dorsal vertebræ.

The second bullet seems to have first passed horizontally through the lung towards the back, where it struck the rib, then rebounded against the side of the body of the ninth vertebræ, and finally lodged in the posterior wall of the heart.

We now come to the coincidence of the mitral valve lesion with the accident, which may be accounted for by the lesion occurring at the instant of cardiac systole when the organ is in a state of complete tension, and any sudden strain would snap the finer fibres.

Braun said he could hardly agree with Kienböck on the theory of the mitral rupture, as the wounding of the cardiac wall without any lesion of the valves whatever will produce a murmur from the imperfect closure of the ostium. We have many cases on record where injury to the base of the heart or its muscular sheath produced murmurs during life although the valves were found to be uninjured at the post-mortem, and others in which when recovery occurred the murmur has disappeared. Barnard observed this lesion in experiments bearing on the integrity of the pericardium. The tricusped was often affected in the same way.

Schrotter thought the history of the case was against Kienböck's theory of rupture by compression, as the path of the projectile was among soft tissue, and did not require to rebound as assumed. Again, to support Braun's theory he must assume that some of the papillary muscles of the heart must have been wounded in the wall of the cardia to produce the insufficiency.

Braun retorted by saying that such an assumption was quite unnecessary, as it has been amply proved by experiment that any interference with the venous supply of the ostium will immediately prevent the valves from perfectly closing the orifice.

Pharmacists on Strike.

The *employes* in the apothecary shops of Cracow Lemberg, and other Galician towns have gone out on strike. They demand higher wages and shorter days. These demands having been refused, the work has had to be attended to by the proprietors.

Winter Health Resorts.

THE CANARIES AND MADEIRA.

[FROM OUR SPECIAL CORRESPONDENT.]

Madeira.—Owing to the exigencies of journalistic space my letter on a recent visit to the Southern Islands was broken off on leaving Grand Canary, and I propose to complete it now with a brief description of Madeira, which, although but a day's journey distant from the Canaries by the fast steamers, differs nevertheless, in almost every particular. It is not my purpose to describe the island as in guide books, nor is it necessary to go into particulars from a strictly medical point of view; this has already been done by Dr. Gordon, Dr. Symes Thompson, and others. Having had to travel for health's sake, my object in penning these brief notes is in the hope of imparting information to the over-wrought practitioner, who can spare a month at this season that will tempt him to escape from his thraldom for the nonce, to enjoy the exquisite beauties of these islands at very moderate cost.

Funchal is the port of call for Madeira, on arriving at which the visitor will be at once struck at the absence of the ordinary wheeled conveyances and the camels so familiar in the Canaries, passengers and their luggage being taken from the shore in *carros* drawn by bullocks up steep lanes to their destination. Several good hotels will be found here at various elevations and at moderate charges. The distinctly Eastern character of the inhabitants and surroundings of the Canaries are not met with here, but, like the camels, are conspicuous by their absence; the rows of single-storied flat-roofed houses have vanished, and in place thereof are two and three-storied houses, attractively built of blue basaltic stone, villas being obtainable for the winter to suit all purses. Within five or six days after leaving the murky atmosphere of some great town in the British Isles, one finds one's self installed midst everything that is beautiful to the sight and agreeable to the senses generally; flowers bloom in midwinter in tropical luxuriance; thus placed, the traveller must be of a severely selfish nature who does not sympathise with those who by force of circumstance or habit are compelled to winter at home. Locomotion for distances is usually on horseback, or the visitor is carried by hammock men if preferred, as in India, a novelty to which one becomes readily accustomed. Here the temperature differs but slightly from that at the Canaries, the mean varying only from 61°F. to 64°F. during the five so-called winter months, but there is more rain, consequently the hygrometric condition is somewhat more favourable in cases of chronic affections of the lungs and air passages; the moist, mild atmosphere with its absolute freedom from dust also forms an excellent sedative in bronchial and asthmatic complaints. As Funchal is protected by a rugged mountain range of 6,000 feet the town is entirely sheltered from the north-east winds.

Cold is not experienced; snow is never seen except in the distance on the mountains, and from here all excursions are taken. The native population are exceedingly polite to strangers, but begging is somewhat of a nuisance here as in Italy, and the authorities might improve matters by rendering the custom house less annoying to strangers.

The route is from Liverpool or Plymouth, the majority of the fast mail steamers of the Elder, Dempster lines sailing from the former direct, and excellent accommodation will be found on board these boats. I may add that the Canaries and Madeira cannot be done within the month if the passage out and home be taken as part, as communication between the two is not sufficiently frequent for this, so that passengers with limited time at their disposal must make choice before starting.

The Operating Theatres.

NORTH-WEST LONDON HOSPITAL.

Operation for Complete Paraplegia of Four and a-Half Years' Standing; Abscess Opened in Posterior Mediastinum.—Mr. **Mayo Collier** operated on a child, æt. 6, the subject of tuberculous disease of spine in the dorsal region, associated with complete paraplegia of legs and loss of control of rectum and bladder. An incision was made from the spine of the most prominent vertebra outwards to the corresponding rib and transverse process down to the bones. The transverse process was bared and exposed and subsequently removed with an elevator. A careful introduction of a blunt director forwards and inwards was rewarded by the immediate appearance of thick caseous pus. This was removed as far as possible by the gentle introduction of a curette, and subsequent streams of water. A drainage-tube was inserted and the wound closed. Mr. Collier said the operation was extremely easy, the caseous pus appearing immediately on removal of the transverse process. Until quite recently, he pointed out, these cases were allowed to die without any attempt at relief. It was now a matter of extreme satisfaction that the pioneers in surgery of the nervous system had directed their attention to the relief of these cases by opening the spinal canal by the operation of laminectomy. By this procedure many cases were relieved or much improved. A still further advance in the treatment of these cases had taken place, notably in the hands of Mr. Jackson Clarke and others by the operation known as costo-transversectomy Mr. Collier had recently had the privilege of assisting Mr. Jackson Clarke in one of these cases, with the splendid result that a paralysed, bedridden, dying child had been restored to health, and was now walking about with comparative ease and comfort. The present case was a similar one, and Mr. Collier had every right to hope that a similar result might be attained in this case also. It was more or less a frequent procedure to treat psoas abscesses by opening them in the lumbar region close to the transverse processes, but this method of treatment had not been applied to abscesses in connection with disease of the dorsal vertebræ. The abscesses formed and extended in the posterior mediastinum, in close relation to the heart and great vessels, which passed down in front of the spine. These relations had naturally deterred surgeons from active interference.

Operation for Goitre.—The same surgeon operated on a case in which in an exophthalmic goître was pressing on the trachea and causing symptoms of difficulty of breathing and pain in swallowing. The subject was a woman, æt. 25, and the disease had lasted some eight or ten years. The isthmus of the thyroid was much enlarged and protruded forwards. Mr. Collier made an incision in the mid line of the neck, and after exposing the isthmus of the thyroid passed an aneurysm needle, armed with a stout ligature, under the growth on each side of the central enlargement. The central mass being thus isolated was removed and the wound closed. Mr. Collier said that operative interference in many of these cases did not benefit the patient, in others collapse and death was the result, but in those cases where pressure symptoms existed the operation was imperative and should be undertaken without delay. Mr. Collier did not anticipate in this case any but beneficial results.

RICHMOND HOSPITAL, DUBLIN.

Two Operations on the Prostate.—Sir **William Thomson** operated upon a man, æt. 62, who had suffered from prostatic obstruction for two years. There had been great irritation, the patient being obliged to pass water every half-hour during the day and about eight times at night. The prostate felt through the rectum, was enlarged, particularly on the left side. The usual suprapubic incision was made, and the bladder explored. The left lobe of the prostate was enucleated with the right forefinger, but the adhesions were very tough and resisting. The right lobe was quite small, and was allowed to remain. There was no middle lobe.

The patient made an excellent recovery, and is able to retain water for four or five hours, and to pass it in a full stream.

The same surgeon operated on a man, æt. 63, who had come from the West of Ireland, and had been admitted suffering from retention of urine. He had been using a catheter for a couple of years, but a sudden attack of retention could not be relieved, and he was sent to Dublin. On admission a catheter had been passed, and an attack of cystitis allayed after two weeks. The prostate felt like a large pear through the rectal wall. The bladder was incised suprapubically, and the whole of the prostate removed in one mass, this part of the operation taking only ten minutes. The prostatic urethra was removed also. There was a good deal of bleeding, which was checked by hot injections. Subsequently it recurred twice, and it was found necessary to place a plug in the bladder over the prostatic area. Pressure was exerted by traction on a piece of silk carried out through the urethra, and the hæmorrhage ceased.

Sir William Thomson pointed out that Mr. Freyer had published several cases in which the prostatic urethra had been torn away without any untoward effects.

The plug was removed in thirty hours. The patient progressed without a bad symptom. The prostate weighed 900 grains.

The death is announced of Mr. F. Manley Sims F.R.C.S., a well-known practitioner of Mayfair. Mr. Sims had been suffering from symptoms of cardiac trouble for some time, and on Monday, December 9th, he succumbed at very short notice to a recurrence of the attacks. Mr. Sims was 65 years age.

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The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 17, 1902.

THE STANDARDISATION OF DRUGS.

For many years past it has been felt that no sufficient guarantee of uniformity of physiological action of medicinal preparations is afforded by mere directions for the processes of manufacture. It is obvious that unless we can make sure of obtaining identical crude materials—an impossible feat—identity of manufacture will not prevent variations of activity within very wide limits. The subject has been thoroughly threshed out before the Pharmaceutical Society by Mr. Umney, who has formulated certain practical suggestions, having for object to obtain that uniformity of composition and therapeutical activity which is indispensable to the scientific and successful treatment of disease. It is evident that this object can only be attained by ensuring in the galenical preparations a constant proportion of the active constituent or constituents of the drug, and all future methods of standardisation must be based more or less on this principle. This has already been done by several manufacturing firms with a success which doubtless accounts for the preference often shown for their products over those which are merely made in accordance with pharmacopœial directions. Unquestionably this system of standardisation represents a distinct advantage on the old methods; but, as Dr. Attfield points out, the presence of a certain proportion of "total alkaloids" is not in itself sufficient to determine the activity of a given preparation, since this total may represent a mixture, in irregular proportions, of unequally active alkaloids. Many drugs, such as hyoscyamus, nux vomica, ipecacuanha, &c., contain alkaloids, the action whereof is subsidiary, or even antagonistic, to that of the really active principle, and a further desideratum may be deduced from this fact, *viz.*, that galenical preparations should be standardised whenever practicable by a single active constituent rather than by a group of constituents such as would be represented by the total alkaloids. In practice the tendency appears to be towards employing these specially active principles in preference to the original substances with their admixture of inert and possibly antagonistic constituents. The process of standardisation by this method, it is hardly necessary to point out, can only be commercially applicable to large quantities, the cost being prohibitive when only small quantities are titrated. The question arises whether pharmacists would incur any responsibility in selling an article named in the "British Pharmacopœia," prepared otherwise than in accordance with the official directions, but that is a point which we must leave to our pharmaceutical brethren to decide for themselves. When pharmacists have worked out the various problems involved in this improved method of standardisation, their results will, no doubt, be embodied in the pharmacopœia and it will then be possible to enforce a higher, more uniform, and more trustworthy quality of medicinal preparations. At present the limits of variation are too wide, and there is, of course, the danger that pharmacists are tempted to approximate what may be termed the penal standard. The standardisation of medicinal agents drawn from the mineral world is mainly a question of purity, and this is provided for by analysis. It is a satisfactory feature that the question should have been raised by those to whom is entrusted the task of providing medical men with their means of action, and they are unquestionably better fitted to solve the problem than is the practitioner, who is unable to determine in a given case whether the inactivity of a preparation is due to its inherent defect or to the irresponsiveness of the patient.

THE BECK AND CALL OF GENERAL PRACTICE.

There is a widespread belief among the general public that a medical man is obliged, by virtue of his office, to obey the beck and call of any who choose to summon him. The absolute fallacy of that position need not be insisted upon in the columns of a medical journal. There is no legal obligation whatever upon a practitioner to go to persons whom he may not wish to attend, nor need he give any reason for his refusal. The only ground upon which any pretext of compulsion could be based would be a moral one, and we are glad to think that humanity of that kind, in its highest practical phases, is not lacking among the medical profession of the United Kingdom. At the same time, there is a limit to human capability, and in busy practice it is often necessary for the overworked practitioner to husband his energies for the service of his regular patients, even to the extent of declining to attend emergency calls from persons outside that circle in his own district. A recent case at Devonport illustrates the difficulties of the position in a remarkable and instructive way. A boilermaker's wife engaged an uncertificated midwife sixty-five years of age to attend her in confinement. She had previously borne thirteen children, of whom seven were living, and on no occasion had a medical man been present at the lying-in. Her husband was a member of a medical society, but she herself was not entitled to the attendance of its medical officer. Shortly after the birth of her infant, at four o'clock in the morning, the midwife informed her husband that something had gone wrong, whereupon he went off to fetch a district nurse. Failing to find the latter, the husband called up one of two medical men in the neighbourhood, who agreed to come if he was paid his fee of one guinea. Instead of procuring the money or promising to pay the fee the husband went off to the second resident medical man, who, however, failed to attend for some reason that is not made clear in the newspaper report. The husband finally secured the attendance of a medical man from a distance. Upon the arrival of the last-mentioned upon the scene, according to the evidence, he found a condition of *post partum* hæmorrhage and retained placenta, complications from which the unfortunate woman rapidly sank. The coroner took a sensible view of the occurrence, and dissuaded the jury from passing a vote of censure upon one of the medical men. Married men, as he very properly pointed out, had their responsibilities, and they should see that a medical man was engaged to attend their wives in so critical a period as that of childbirth. It would be the gain of the public were all coroners equally sensible and outspoken in their opinions as Mr. J. A. Pearce when he said that, "If people would insist upon engaging those old women, who were nothing more than Sarah Gamps of olden days, then they took the responsibility upon themselves, and must not complain of doctors not attending when the fee was not forthcoming." We may go much further than that, and remark that even with certificated midwives many cases must arise that need the intervention of a medical man. Parliament has seen fit to place a large section of the midwifery practice in the hands of women who, by the nature of things, cannot be equal to all emergencies. They have freely accused the medical profession of sordid motives in opposing the recognition of that hybrid class of unqualified practitioner, yet at the same time they have retained sufficient belief in the good nature and humanity of the profession to assume that its members will be at the beck and call of the midwife to help her clients in emergency. The sentimentalists who have pushed the Midwives Bill through Parliament in the face of the almost universal opposition of general practitioners may now form some surmise of what is likely to happen in the future. Can they be surprised if the medical man refuses to be called up from his hard-earned rest to attend a person who has already engaged services other than professional? A medical man may be up three nights out of the seven with his own patients; why should he be disturbed on a fourth night to go to strangers who are not likely even to pay his fees? That argument is based simply upon the commercial aspect, with which the profession was freely taunted in Parliament. In the Devonport case the husband subscribed to a club; why did he not summon the club doctor? Moreover, there is a parish doctor in every district, whose attendance would be a matter of duty. Why did he not go to the parish medical officer? Why should he choose two busy private practitioners in the district, and decline to pay or to promise to pay their fees? Even in the first instance he turned for help to a district nurse, and only after failing to find her, did he think of going to a qualified man. Can it we wondered if public slander and ingratitude ultimately awaken a spirit of common-sense prudence on the part of medical men in responding to the beck and call of all and sundry in their immediate neighbourhood who may be desirous of securing gratuitous help?

QUACKERY AND THE "RELIGIOUS" PRESS.

We have on several occasions been compelled to refer to the serious action taken by certain so-called religious journals in aiding and abetting some of the grossest and most immoral forms of quackery and charlatanism. A flagrant example has recently been brought to our notice, and after serious consideration, we are of opinion that it is our duty in the interests of the public good, to refer directly to the periodical which has knowingly become the vehicle for the propagation of what we venture to think is one of the worst forms of dishonesty. The winter number of the *Methodist Recorder* has two full-page advertisements, the character of which will be sufficiently indicated by brief extracts. The one emanates from an "oculist and aurist," who declares that "it would appear to be *not known* well enough among suffers from diseases of the eye and ear that a system of treatment exists whereby at their own fireside they may be cured." As a heading there is the sensational announcement, "Valuable Scientific Discovery. Deafness. Blindness. A new method of treatment without operation. The Blind See. The Deaf Hear." The greater part of the page is filled with "testimonials." Another page of this "religious" periodical is devoted to an "institute of chest specialists." In large and arresting type we read: "Hope for the 'Hopeless!' Consumption, asthma, bronchitis completely and permanently cured." The reader is then informed that "The treatment strikes right at the seat of the disease and entirely eradicates it in a remarkably short time." And the treatment is such that "it can easily be carried out by any sufferer in his or her own home, and need not interfere with the occupation where same is still followed." Needless to say that in both cases the advertisements are so framed as to impose on the ignorant and inexperienced, and clearly indicate the cruel and unscrupulous methods of the advertisers. But it is not our purpose to find fault at the present time with the advertisements themselves, but with the conduct of those responsible for the publication of this so-called "religious" paper.

This paper, in regard to the publication of risky advertisements, is an old sinner, and still, unrepentant, carries on its deeds of darkness. We are informed that numerous efforts have been made to prevent the appearance of objectionable advertisements. The attention of the Editor has been frequently drawn to the evil resulting from their appearance. The authorities of the church of which the Editor is a "minister" have been approached by medical men of the highest position in the profession, but nought avails to arrest the scandal. We understand the paper has a very large circulation among the worthy working class, and gains entry into many a village home. Under the guise of religion, physical and financial loss is being wrought throughout the country, and needless suffering and oftentimes death is the result. It may seem unreasonable to attempt to rectify the errors of "the children of light," but we count it an absolute duty to warn practitioners working among our "believing" operatives, and medical men practising in country districts, of the subtle danger which is gaining entrance into many a home through the pages of this attractive magazine; and we hope our energetically ethical contemporary, *Truth*, will see its way to assist the profession in warning intelligent "Methodist" laymen throughout the country of the pernicious influence, which, like the devil in monk's garb, seeks to clothe deceit in the cloak of religion.

Notes on Current Topics.

Lord Lister's Jubilee.

Fifty years have gone by since Mr. Joseph Lister, now Lord Lister, was admitted a member of the medical profession, a date fraught with an importance to medicine and to humanity little suspected at the time, but one which will be remembered throughout the ages. His teaching has left an impress on medicine as obvious and as indelible as that of a Galileo or a Darwin in this respective domain, it forms an integral and indissoluble part of the scientific acquirements of the world at large, and it influences the conduct of practitioners wherever medicine is practised. It would be a gigantic error to suppose that the principles of antisepsis apply only to surgery. Their influence has been exerted in practically every department of the healing art, and it is indeed the most remarkable, and perhaps the most successful, of the achievements of preventive medicine. Placed side by side with the progress which Listerian principles have accomplished, those of the most gifted physician, the most brilliant surgeon, pale their ineffectual fires, for the one is peculiar to the individual, the other is the common property of humanity. Rarely has it been permitted to man to witness the universal adoption of principles in their inception so diametrically opposed to the ideas then prevalent. His principles prevailed in virtue of their essential truth, not forced upon a reluctant world by the dialectic sword or propagated by the tireless pertinacity which confers notoriety, if not fame, upon discoveries of comparatively trivial importance. Lord Lister, with modesty and simplicity, gave his results to the world, and little by little they banished the horrors of the operating theatre from our midst. It must be a source of intense satisfaction to all who have the interests of suffering humanity at heart to reflect that Lord Lister is still among us, full of years and honours, to enjoy the spectacle of a rejuvenated art, and to receive the congratulations of an admiring and grateful professsoin—a profession which is not limited to any one nationality, but carries on its beneficent work throughout the world. The fame which is Lord Lister's is one which the greatest may well envy. It surpasses that of Jenner in that it reposes on a much wider base—it is, in truth, the reward of the discovery of a system, and not of an isolated fact.

An Unusual Abdominal Tumour.

Considering that the abdominal walls are soft and yielding throughout their whole extent, it might reasonably be expected that tumours in the cavity should be readily diagnosed. But, as Sir Thomas Watson long since pointed out, the contrary is the fact. A tumour occupying the mesial line of the abdomen that in February last came under the notice of Dr. Franceses Villa, of Milan, was a good example of the difficulty of diagnosis in such cases, and is also worthy of record as one of the few cases of solid pedunculated tumours of the urachus that have been discovered. The patient, a woman, forty-five years old, came complaining of a severe pain at the site of her navel which had continued almost without intermission for three months. The pain extended transversely across the abdomen, and was attended by some constipation. The recti muscles were hard and rigid, and so much contracted that the patient was forced to assume a stooping attitude. Deep respiration did not intensify the pain. Her viscera were healthy, her urine normal in amount and frequency. Early in the disease carcinoma with occlusion or narrowing of the transverse colon was diagnosed. On opening the abdomen Dr. Villa found a pedunculated solid tumour attached to the posterior wall of the umbilicus, to the posterior surface of the right rectus muscle, and so intimately attached to the apex of the bladder as to necessitate the excision of a considerable portion of the wall of the viscus. The tumour, which was vascular, was the size of a large goose egg, and to its posterior surface some loops of small intestine were adherent. One of the principal difficulties in the diagnoses of abdominal lesions is our lack of knowledge of the physiology of the sympathetic nerve. When we know the part it plays as a sensory and trophic nerve we shall be the better able to judge of the symptoms associated with the presence of abdominal tumours.

Lime Salts in Epilepsy.

A series of very interesting experiments on epileptic patients, varying from fourteen years to thirty-seven years of age, has been conducted by Signors Hudenino and Borelli in the clinic of Lombroso. Noticing in many epileptics that lime salts were badly and sparingly assimilated, they decided to try the effects of lime salts on well-marked cases of the disease. They commenced by giving lime water, and finally prescribed the bromide, the lacto-phosphate, and the carbonate. They believe that the lime salts lessened the severity of the attacks and lengthened the intervening interval. In one case the time between the seizures was increased by forty days, and in another by one hundred and fifty-six days. Recognising that lime is absorbed in very small quantities from the alimentary canal, the authorities decided to try the effect of lime administered hypodermically. Of four cases so treated one recovered, but the three others showed no sign of improvement. Without claiming any curative properties for the lime salts in the treatment of epilepsy, the authors say that lime given hypodermically, or by the mouth, has the power of diminishing the number of the attacks and lessening their severity, and with Sabbatini they believe that lime salts have a quieting influence on the cerebro-spinal nervous system.

Laboratories in Wards.

There is perhaps at the present day a tendency, principally in the richer schools of medicine, to exaggerate somewhat the position of the clinical laboratory in the training of the student. He is taught sometimes—not, indeed, to place too much reliance on bacteriological and pathological results, for that is impossible, but to place too little confidence in the results of careful clinical examination of his patient, or to shirk the bedside investigation for the more mechanical methods of the laboratory. It must not be forgotten that phthisis was diagnosed accurately before Koch, diphtheria before Klebs and Löffler, and typhoid before Widal, and though the methods associated with these names are of inestimable value as an aid to diagnosis, yet the student should not rely entirely on them, but should be trained to form a careful opinion at the bedside, correcting it by his laboratory results. Yet true as this is, we cannot go quite as far as some distinguished clinical physicians and others in their reaction against the domination of the laboratory. For instance, Dr. Shepherd, Professor of Anatomy at McGill University, in his presidential address to the Canadian Medical Association, urges the relegation of laboratory training to the first two years of the medical course. He proceeds:—"Such giants as Pasteur, Lister, Koch, and others were not produced by magnificent laboratories . . . they made their opportunities and forced Nature." Very true, but before the days of magnificent laboratories the work of such giants was impossible, and if there were anything beyond rhetoric in Dr. Shepherd's argument it would hold equally against universities and colleges, and even his own dissecting rooms.

Medical Students.

The modern medical student has become a very different kind of man (and woman) from the type made famous by the literary labours of Albert Smith a couple of generations ago. The ever-increasing stringency of high standard examinations renders the life of the aspirant to medical qualification both anxious and laborious. To-day there is no leisure for cider-cellars and "half-and-half" and the boisterous rowdiness pictured by the classical historian of student life in the days of our grandfathers. After all, the change is perhaps not so much greater in this particular class than it has been among society in general. The tradition of the rowdy medical student, however, still lingers in the popular mind, where the belief is most likely fostered by the newspaper reports of police cases in which medical students are said to be concerned. The fact is, of course, that any person in a scrape finds it easy and convenient to describe his occupation in that way. In this way the name of an honourable and steady-going class of society is daily dragged in the mire. An effectual remedy, strange to say, is ready at hand in the shape of the Medical Students' *Register*, published yearly by the General Medical Council. A copy of that work ought to be at every police court as well as in the possession of every newspaper editor. A glance at its pages would settle off-hand the right of any prisoner or defendant to describe himself by the appellation of "Medical Student."

' Over-Nutrition" *versus* Degeneration.

The frequent failure of medical education to educate the higher mental faculties is now and then illustrated in a striking fashion in the various courts of law. In giving evidence a scientific witness is often required to justify his opinions and compelled to refer facts to their causes. Unfortunately, the whole scheme of modern high standard medical education appears to aim at the acquisition of huge masses of particular phenomena and observations, to the crowding out of general laws and principles. The result is a qualified man somewhat in the position of a mariner who steers by the stars, but whose knowledge of navigation would not permit him to navigate through a spell of fog and darkness. In other words he is purely empirical. An instance of outer professional ignorance of the sort we have in mind was afforded not long ago at an inquest, where a medical man testified as to the results of a post-mortem examination. Deceased, he said, died of exposure and cardiac failure. The latter was due to fatty heart, and the liver and other organs of the body were also in an advanced stage of fatty change; indeed, they were in a "hopeless state of over-nutrition" from the effects of chronic alcoholism. This farrago of nonsense evidently arose from a confusion of what may be called healthy or storage fat and that resulting from tissue degeneration. The incident throws a side-light upon medical education that will give pause to the authorities responsible for our modern curriculum and its educational tests.

Operation for Ruptured Intestine.

The report of the Boston City Hospital for 1902 contains several cases of successful operation undertaken for rupture of intestine, and this may serve to encourage surgeons to resort to operative measures whenever there is reasonable cause to suspect the occurrence of this grave lesion. As a matter of fact, surgeons hardly need encouragement in this direction, since no one would hesitate to intervene were he certain that laceration or perforation had actually taken place. In view of the fact that this injury may occur without any outward or visible indication of the gravity of the accident, the question turns rather upon the conditions under which the surgeon is justified in operating. Obviously, if he only operates in cases which do not admit of any doubt, he will sacrifice a certain proportion of patients, because the question of time here, as in so many other abdominal conditions, is all important. Every hour of delay adds materially to the danger, and unless the operation be undertaken within a few hours of the accident the risk of a fatal issue becomes progressively greater. We cannot wait for signs which will make the diagnosis absolutely certain, for by so doing the value of the intervention will be jeopardised, and as operation holds out practically the only chance of recovery, and as, in many instances, its existence can only be made out by operation, the sooner this is done in suspicious cases the better for the victims of this kind of traumatism as a class.

The Gordon Memorial College at Khartoum.

Dr. Andrew Balfour, of Edinburgh, who has been appointed director of the bacteriological laboratories of the Memorial College at Khartoum had a hearty "send-off" a few days since at a dinner provided by Mr. H. Wellcome, at the Prince's Restaurant, when many eminent scientific and medical men were present in honour of the occasion. The laboratories in question have been presented to the government of the Soudan by Mr. Wellcome, whose munificence took this form consequent upon his travels in this interesting region, many trophies from which graced the dining-room and the adjoining hall. The laboratories have been specially fitted to enable the study of tropical diseases to be carried on *sur place*, and provision has also been made for medico-legal investigations, water analysis and researches in the department of agricultural and mineral chemistry. The gift, it will be seen, is one of incomparable value and importance, and may be trusted to yield encouraging results. The toast, "Success to the College," was proposed by Sir H. M. Stanley, who described in eloquent terms the rapid progress that is being made in the civilisation of the Soudan, and held out hopes of a great future for the children of the Soudan, "the heirs of the ages.' Mr. Wellcome proposed Dr. Balfour's "health and prosperity," and expressed his conviction that the climate of the Soudan would be found excellent in the treatment of tuberculosis. Mr. James Cantlie, Sir Dyce Duckworth, Sir Richard Douglas Powell Bart., and others also spoke on tropical medicine, and clinical and bacteriological research. Dr. Balfour carries with him our best wishes for the success of his career in the Soudan, where subjects of research in abundance await him.

Gonorrhœal Endocarditis.

Among the most dangerous, but luckily least common, complications of gonorrhœa is endocarditis. When it does occur it is, of course, the result of a general blood infection of a septicæmic nature, and in nearly every case the specific organism has been separated from the blood in circulation. Drs. Harris and Johnston, of Johns Hopkins, have recently (*Johns Hopkins Hospital Bulletin*, October, 1902) placed a case on record, and have given a careful analysis of the other recorded cases where bacteriological examinations had been made. During life the authors separated the gonococcus from the blood, while after death it was cultivated both from the heart's blood and from agitations on the mitral valve. In cultivating the organism from living blood, the latter should be but slightly diluted, and it is advisable to mix it with melted agar and then plate, rather than to attempt a liquid culture. The bacteria become more plentiful as the disease progresses, and the blood does not seem to gain any bactericidal power.

Medical Men and Deaths under Chloroform.

At an inquest held at Bournemouth last week on the body of a man who had succumbed while under the influence of an anæsthetic, administered for the purpose of performing an operation for the relief of appendicitis, some remarkable circumstances came to light which appear to call for comment. The patient had been under treatment for chronic appendicitis with pleurisy, and a subdiaphragmatic abscess being suspected, attempts were made to reach it, but had to be relinquished on account of the hæmorrhage. A subsequent attempt proved equally futile. Ten days later it was decided to remove the appendix, and A.C.E. mixture was given with that object in view. When, however, the patient was placed on the operating table he collapsed and died. Some hesitation was experienced in giving the certificate of death—as well there might be—and ultimately information reached the authorities which led to an inquest being held. The post-mortem examination made by the police surgeon showed that the body had already been examined after death, and the witness stated that in his opinion the man was not in a fit state to undergo anæsthesia, being, in fact, in an advanced stage of septicæmia. Dr. F. T. Gardner, who was in charge of the case, was sharply reprimanded by the Coroner for having omitted to refer the case to him forthwith. He defended his hesitation in regard to the certificate on the ground that coroners did not invariably insist upon holding an inquest under such circumstances, but he was unable to mention a specific instance in which no inquest had been held. His conduct in making a post-mortem examination on his own account without mentioning this in his evidence was also strongly condemned by the coroner. It is hardly necessary to point to the undesirability of departing from the usual course in such a case. Obviously everything was done that could be done for the unfortunate patient, but surely every medical man is aware that death under an anæsthetic is a proper subject for inquiry and, this being so, that a private examination of the body is highly improper. The Coroner disclaimed any intention of criticising the propriety of administering chloroform in this particular case, nor, indeed, could he well have done otherwise, seeing that the three medical men present approved of its use. The case is one which should serve as a warning to medical men always to court publicity after an accident of this kind, if only for the purpose of exonerating their own responsibility.

Orchitis from Strain.

The occurrence of orchitis apart from urethral infection has been called in question, but judging from cases recently reported to the French Chirurgical Society such may be the case, and the point is of some interest in view of possible medico-legal and social complications. Non-infective orchitis of this kind is characterised by a tendency to recur under similar circumstances, by its moderate intensity and by the promptness with which it undergoes resolution. This form of orchitis is *a priori* more likely to present itself in persons who have previously suffered from some other form of testicular inflammation, but in such subjects it is, of course, impossible to ascertain what precise share strain *per se* takes in its production. The essential point to bear in mind is that orchitis is not necessarily due to urethral infection or direct external traumatism.

The Drouet Institute for Deafness.

Of all the heartless "cures" that can be palmed off on a credulous public, that which professes to remedy deafness is one of the most pernicious. In spite of frequent exposure in our own columns, as well as those of other journals, however, the notorious Drouet Institute continues its career, apparently with unabated success. Our fearless contemporary, *Truth*, has been untiring in his endeavours to scotch this insidious enemy of the community. In his issue of December 11th, the Editor, commenting upon the advertisement of the Institute in *Household Words*, remarks that "when the same swindle is freely advertised by the wealthiest and most influential of London papers, perhaps one is not justified in throwing stones at Dickens' old journal." That observation reminds us that the *Daily News*, in common, it is fair to add, with other metropolitan dailies, inserts Drouet's advertisements. Now, the *Daily News* excludes betting news on grounds that are irreproachably moral and didactic. It seems hardly consistent, however, for the same journal to be receiving large sums of money for the advertisement of what has been again and again publicly denounced as a shameless imposture. A few days since a church dignitary was heard in a public vehicle advising an anxious mother to take her son to the Drouet Institute. In answer to a suggestion of unqualified practice, the reverend gentleman said it had been found absolutely impossible to prosecute Drouet. That hardly represents the right view of the case, as Drouet has never brought an action in self-defence, although urged to publicly again and again by all kinds of injurious and opprobrious epithets.

Laparotomy in Typhoid Perforation.

Surgical intervention for the relief of perforation of a typhoid ulcer has not hitherto been attended by any great measure of success even in hospital practice, where alone the intervention is likely to be resorted to without dangerous delay. One cause of the failure to save life is apparently that although only one ulcer may actually have perforated others are on the point of giving way and ultimately do rupture, thus vitiating the result of the operation. From the medical point of view the great obstacle lies in the extreme difficulty of deciding whether or not perforation has actually taken place. The absence of liver dulness which is such a valuable guide in perforation of a gastric ulcer, for instance, is of less significance in these cases because the marked abdominal distension usually associated with an attack of typhoid fever may mask it even in the absence of actual perforation. The trend of opinion seems to be that when there exists a reasonable probability of an ulcer having given way it is well to operate, especially as perforation in typhoid fever usually takes place late in the course of the disease, that is to say, after the third week, at a time when the patient is in a state to withstand the operative shock. It is generally agreed that operative measures for perforation which supervenes during the active, acute stage is useless, and, if resorted to, is likely to bring the procedure into unmerited discredit. Physicians no longer evince any reluctance to requisition the services of the surgeon in these cases, since, although the chances of recovery are small, they are desirous of affording their patients this one desperate hope of being spared the otherwise unavoidably fatal issue. It is possible, however, that small perforations take place more frequently than one is apt to suppose, in the absence of the characteristic symptoms, and there is actual evidence that such perforations may and do undergo spontaneous healing. The supervention of the classical symptoms of perforation—a brusque fall of temperature with acute abdominal pain, sweats and profound collapse—probably indicate not only that perforation has occurred, but also that the perforation is one of some magnitude.

On Christmas Fare.

CARELESS of the origin of Christmas rites, the average Briton turns with stolid contentment to their celebration by the generous aid of kitchen and cellar. This indulgence applies happily more or less to all ranks and conditions of men among us, for at this time of the year the rich are not forgetful of the wants of the poor, for whom plum pudding and beef, not to mention ale and tobacco, are provided wholesale in all parts of the kingdom. The solid, strong and sober taste of our countrymen, we are proud to think, has solved the question of what is best to eat at Christmastide in a fashion that is final, for it is useless to gild refined gold. We have set our solemn seal of approval as a nation, upon such triumphs, natural and artificial, as turkey, goose sirloin of beef, plum pudding, mince pie, the which we garnish for the feast with mistletoe and holly, and wash down with nutbrown ale, sound claret or port, and a glass of punch withal. Yet this array of fare, though toothsome and even rich, hath no grain of malice, for he who eats of it without excess to-day may indulge again to-morrow. We are proud to think that nowhere outside the United Kingdom can plum puddings be properly made. There is some charm, seemingly, in our capricious atmosphere that is essential to the birth of that king of dishes, witness the fact that thousands of tons of plum pudding are sent forth yearly to every corner of the inhabited globe. It is not a little consoling to be able once and for all to dissipate the musty popular joke which attributes all kinds of maladies to Christmas fare, earmarking that wintry holiday as a very windfall for medical men. On the contrary, a merry Christmas is the best of all pick-me-ups for jaded mankind.

Diphtheria in Carlisle.

OWING to the prevalence of diphtheria in Carlisle the attention of the local authority has been called to the matter by the Local Government Board. The Medical Officer of Health was thereupon directed to furnish a special report upon the subject. His subsequent communication to the Health Committee appears to have dealt chiefly with a certain school to which a number of cases of the malady in question had been traced, and which had been closed three weeks before. Overcrowding, according to the report, has been allowed to exist to a scandalous extent, mainly owing to the slipshod custom of admitting school children who were not on the register. In the main room of the infants' department the figures given allowed about three feet of floor space to each child. The walls and school furniture and equipment were in a filthy condition, and much of the material was destroyed by the Sanitary Inspector. The teachers had suffered from sore throats and headaches for some time past, and one had contracted diphtheria. After an exposure of this kind one would like to know something more about the system under which such a state of affairs could have existed. Why has not the condition of the school been brought long ago under the notice of the local sanitary authority? A matter of this kind is of interest wherever there are schools and school children. Perhaps some of our Carlisle readers will kindly supplement and extend our information as to the particular school that figures with so little credit in the official report.

Lunatic Asylums in Venice.

THE correspondent of a usually well-informed London newspaper has forwarded a description of the terrible treatment to which lunatics are subjected in Venetian madhouses. These revelations are the outcome of the labours of an official commission of inquiry appointed by the Prefect of Venice. Want of ventilation, filth, overcrowding, and other hygienic defects form a small part of the indictment. Medical inspection appears to have been irregular and perfunctory, and often absent for days together. Violent patients were bound in their beds by leather bands tightly drawn about the throat, wrists, and ankles. In one cell, too small for the accommodation of a single inmate, two women were found. One of them was very ill, and lay free on her bed. The other wore round her waist a heavy leather girdle, to which her hands were fixed, and in that condition she was chained to a ring in the wall. Similar rings were found in all the cells. It is gratifying to learn that the Prefect of Venice has suspended the governors of the asylums incriminated, and it is to be hoped that henceforth modern humane methods will be introduced into Venetian asylums. It seems incredible that such a state of affairs could exist nowadays. For all that we should remember that it is not so many years ago since equally barbarous methods prevailed in our own country with regard to asylum treatment. Happily, the old idea that insanity was caused by the invasion of devils, who could be cast out only by harsh measures, has become a thing of the past in all civilised communities.

Destructor Refuse.

THE burning of town refuse in a "destructor" is regarded by most persons as a drastic method of "purification" by fire of a heterogeneous mass of undesirable material. No one who has seen the workings of that fiery holocaust could imagine the issue therefrom of any germ of life. The local authorities of Yarmouth, however, appear to doubt the efficacy as a germicide of the destructor which disposes of the refuse in their ancient town. The question arose out of a report submitted by their medical officer of health, calling attention to the prevalence of diphtheria, and suggesting a number of precautions to be taken with a view of keeping the disease under control. Thereupon a Councillor solemnly advanced his private theory that one cause of diphtheria among young children was the refuse from the destructor used on the roadways. He further stated that in some parts of the town the nuisance caused by the material mentioned was simply unendurable. If that be the case the destructor used by the Yarmouth Town Council must be of a kind fortunately unknown to the majority of mankind. An efficient apparatus will burn ashpit and road refuse, to say nothing of sewage, and leave behind practically inodourless ashes and clinkers, in which no germ of diphtheria or of any other living thing could possibly exist at the time of leaving the furnace. During the process of burning it is true that the most abominable odour often poisons the whole neighbourhood, but that is a thing apart from the solid refuse of combustion. It would be more to the purpose were the Yarmouth councillors to look after the salt water flushing of alleys, the supply of anti-diphtheritic serum, and the other excellent measures advocated by their medical officer.

The Illness of Lady Dudley.

We are glad to be able to inform our readers that her Excellency the Countess of Dudley continues to make steady progress towards recovery. As is well-known, Her Excellency developed a severe attack of acute appendicitis which necessitated an operation on December 8th. The operation was performed by Mr. C. B. Ball, Regius Professor of Surgery in the University of Dublin. The bulletins which have been issued twice daily have on almost every occasion born testimony to steady improvement, and we may expect that in a few days her Excellency's medical advisers will be able to pronounce her to be out of danger.

Ginseng, a Chinese Aphrodisiac.

As an article of commerce the root of the *Arabia quinquefolia* has a considerable and increasing value in North America. It is greatly prized by the Chinese for its medicinal uses, the nature of which is not exactly known, but which is generally supposed to be of an aphrodisiac character. The American plant is closely allied with the *panax* or *Arabia ginscheng* of Eastern Asia. Its roots were formerly collected in the woods in North America, where they were indigenous, but they are now cultivated in that country on a somewhat extensive scale. As the roots can be sold in the States at two dollars a pound; while in China the best quality commands as much as sixteen dollars a pound, the cultivation of the plant clearly opens up a wide field of commercial promise. It is interesting to recall the fact that this curious root figured largely in the time of the South Sea bubble at the beginning of the 18th century. During that period of speculative mania ginseng root sometimes changed hands at the exorbitant price of sixty guineas a pound. At its present modest market value, home cultivation would well repay the Chinese farmer, and it may be supposed that before many years have elapsed, that fact will be appreciated by the wily natives of the Flowery Land. The medicinal virtues of ginseng have not commended themselves to the Western scientific mind, although it is possible that the root may contain properties worthy of further investigation by experts in materia medica.

Bishops and Babies.

That British bishops are not all bachelors and celibates is generally known, but it has been left to Mr. H. G. Wells to discover that the birth-rate in episcopal families is conspicuously higher now than it was a hundred years ago. The family circumstances of the bishops and archbishops between the years 1770 and 1800, and between 1870 and 1900 have been investigated. In the former period there were 45, of whom 38 were married, with a total of 150 children, giving an average family of 3·94; while in the latter period of 52 ecclesiastics, 44 were married, and the total number of children was 241, an average family of 5·47. These surprising figures would furnish a text for a lay sermon and certainly offer material for interesting speculation. With a falling birth-rate in the country it is astonishing to find the episcopacy offering such a practical protest. Does it mean that this particularly select body of mankind is becoming our proletariat and so compensating for the less prolific of the community? We hope this new and ingenious form of research will lead to further revelations. Such figures tend to lighten the monotony of vital statistics.

The Hygiene of the Scottish Tinker.

It is a remarkable fact that, in spite of all progress in sanitary matters there are certain sections of the community which remain to a certain extent outside the sphere of action of hygienic reform and sanitary law. The vagrant and vagabond classes, the professional tramp, and the gipsy all continue in open opposition to procedures essential to health and neglectful of moral obligations. But among the migratory "unfit" the Scottish tinker presents many features of particular interest to the sociologist and sanitarian. Mr. John Macdonald has made this interesting people the subject of careful study, and his paper on "Tinker Children," in the recently-published "Proceedings of the Third International Congress for the Welfare and Protection of Children," is deserving of thorough consideration. The northern Tinkers are found usually north of the Forth and the Clyde. It is estimated that there are about 300 families in the Highlands. Formerly they were hawkers and repairers of tinware, as their name indicates, but since zinc and enamel ware have replaced tin they live almost entirely by begging, which is carried on chiefly by their children. The farmer often finds the tinker a good and cheap labourer, and therefore encourages him in his shiftless habits. In some cases the tinkers have provided themselves with caravans and ply the trade of the hawker. But the greater number live in tents, and some in winter time make a home in caves. They are exposed to much hardship, and in cold weather their lot is deplorable. It is said that half the children die within the first year. The great vice of the tinker is drunkenness. He has no inducement to be provident, and is utterly disregardful of hygienic requirements. The adults are absolutely ignorant, being able neither to read nor to write. The children, generally speaking, receive no education. They just follow their parents, much as a dog does his master, inheriting and copying the vices of their elders and perpetuating what has been the tinker's life for generations, with little change and practically no improvement. In short, the life of a tinker is the life of a savage. Attempts have been made to bring this wanderer within the restrictions and controlling influence of civilisation, but hitherto with but little success. The tinker is a picturesque feature in the Scottish landscape, but he is in many ways a menace to the moral and physical health of the community. As a chain depends for its strength on the stability of the weakest link, so the well-being of a people may be rightly judged by the measures of protection extended to the weakest individual. Estimated by such a standard we have still room for much expansion in the application of hygienic methods to the migratory classes, and especially to the interesting but neglected folk we still pleasingly designate—tinkers.

Literary Atrocities.

The most curious example, which we have ever come across of writing for writing's sake and of a quaint taste for the use of non-existent terms, is to be found in an article in a contemporary entitled "Landmarks in the Uterus." The title does not convey much, if any notion of the subject matter of the article, which consists of a mass of real and assumed facts, either remotely or nearly connected with the uterus, strung together without any apparent motive or object save to enumerate the facts in the longest words possible, and to omit such literary small game as articles and other monosyllables. Most curious are the terms invented for the occasion, and the "results" which are apparently bound up with certain "age periods" in the history of the uterus. The most fascinating of the many extraordinary terms are, perhaps, those used to convey the relations of the uterus to the rest of the body. *Holotoly* implies its relation to the "general body," *Skeletopy* to the osseous skeleton, *syntopy* to the adjacent viscera. *Idiotopy* conveys the relation of component uterine segments to one another. *Pueritas* is the term applied to childhood—a nicely sounding word enough, but some better reason than that is required for its existence, as it is not to be found in any Latin dictionary with which we are familiar. Amongst many other facts we learn that "the tractus urinarius shares in altered vascularity with the tractus glentalis during its crisis or during its maximum functions as pubertas, menstruation, gestation, puerperium, and climacterium. It is most evident in gestation when renal secretion is disturbed, nephritis, albumen, also in the climacterium when renal secretion is excessive, deficient, or disproportionate!" It is unnecessary to add that this extraordinary performance is American in origin; true, it is somewhat of a failure as an attempt to instruct, but as a collection of polysyllabic words of uncertain etymology it is very hard to beat.

The Physiology of Laughter.

There may be some foundation for the view of our Continental neighbours that we are a "sad" people, but we may at least congratulate ourselves that an Englishman has furnished the world with a serious work on Laughter. Professor Sully's new book, "An Essay on Laughter," will not only furnish much material for the psychologist, but cannot fail to interest the physiologist, and we venture to think will prove of no little service to the observant medical practitioner. The evolution of the laugh is certainly worthy of systematic study. If we consider it as an exaggerated and vocal smile, it is necessary to trace its first appearing in the infant and seek its early manifestation in the higher apes. Its physiological mechanism is complex, and it is not easy to make clear discrimination between the laugh and the sob or sigh. Transition from the one to the other is ready and frequent. And one cannot afford to neglect those forms of expression which, in states of mental alienation must be considered as more or less pathological. If it be one of the chief objects of the doctor's service to bring back to his disconsolate and despairing patient the tonic and invigorating influence of "a good laugh" it will be well that he should investigate its origin, nature, and action.

Royal University of Ireland.

His Majesty the King has been pleased to appoint the Right Hon. the Earl of Meath to be Chancellor of the University in succession to the late Lord Dufferin. The Right Hon. the Earl of Westmeath has also been appointed to be a member of the Senate. The Vice-Chancellorship of the University still remains vacant no appointment having been made thereto since the death of Lord Morris and Killanin; it is invested in the Senate and we understand will be filled in the near future. This would have been done in January last but for an irregularity in the election of direct representatives of graduates of the University on the Senate.

PERSONAL.

Mr. L. **Sworn**, of Epsom College, has been elected to a mathematical scholarship at New College, Oxford.

Professor J. Rose Bradford, F.R.S., has resigned the post of Professor-Superintendent of the Brown Animal Sanatory Institution.

Miss Constance A. Bennett, M.B., B.Ch., Dublin has been appointed Resident Medical Officer to the Dundee Poorhouse and Hospital, in succession to Dr Laura Saneman.

Professor Isidore Neumann, of the University of Vienna, having attained the age limit, resigns the chair of dermatology as from the end of the year, and Professor Franz Maracek has been appointed his successor.

Dr. A. Loir, a nephew of the late M. Pasteur, has gone to Buluwayo in order to establish there a branch of the Pasteur Institute for the treatment of rabies. Of late there have been many cases of the disease among domestic animals in Rhodesia.

Dr. Stevenson, M.O.H. for Clydebank, was entertained at a dinner by the inhabitants last week, when a handsome presentation was made expressive of their appreciation of his kindly and efficient services in the district during the last quarter of a century.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

BELFAST.

[FROM OUR OWN CORRESPONDENT.]

Ulster Medical Society.

The opening meeting of the Session was held in the new Medical Institute, Belfast, on Thursday last, December 11th. The President, Dr. John Campbell, occupied the chair, and delivered his inaugural address, taking as his subject, "The Relation of Medical Men to each other and to the Public."

Before entering on his subject the speaker, Dr. Campbell, expressed his pleasure at being the first to occupy the chair in the new institute, the generous gift of his predecessor in the chair, Sir William Whitla. The speaker then proceeded to refer to the relations of medical men with each other. He said that in Belfast the general relations were, on the whole, very good, and quoted the opinion of the late Dr. Lawson Tait to that effect. Many men were ignorant of the fact that ethical rules had been published and endorsed by the profession, which would be found to afford guidance in almost every ethical difficulty, and these should be read by every young medical man before entering on the practice of his profession—for many mistakes were made through ignorance.

Patients changing their medical advisers were fruitful sources of difficulties and misunderstandings, and, unfortunately, the medical men who felt aggrieved blamed, not the patient who was often chiefly to blame, but his supplanter. In these cases a frank and friendly conference between the medical men of the neighbourhood would do more to smooth matters than anything else.

As regards consultants, the ideal consultant would, no doubt, be one who never saw any case except with the general practitioner in charge of it, but this course was impossible to follow, as the custom of seeing all comers at one's own house was firmly established. The consultant had difficulties both with the public and his fellows. A section of the public looked on all medical men as guessers, and went from one to another, hoping eventually to find one who, according to their ideas, guessed right. In dealing with his fellow medicals, the consultant might write to tell them of cases he had seen at his house, but if he did they sometimes resented what they considered his interference, and if he did not they might consider themselves slighted. The sum of the matter was that the consultant must consider the patient first, but carefully avoid anything that looked like an attempt to exalt himself or his own importance at the expense of the general practitioner. The duties of the profession to the public were very varied—we were advisors, confessors, and friends. Perhaps our hardest duty was to fight against a feeling of contempt for foolish people, and avoid cultivating a cynical attitude towards the weakness of humanity. The public generally believe on the possibility of putting a name to every ailment, and in the existence of a cure for each. Though admitting that death must come to all, they seldom admit that it comes at the right time, and believe that if only the doctor had hit on the right treatment its coming might have been delayed.

The large majority of the public were honest and straightforward, but a minority gave trouble; chief among these were the gossip-mongers. Rumour is ever a lying jade, but never more so than when she deals with medical matters.

A lower class of people were those who tried to extort money, sometimes by threats, but these were best dealt with by a medical protection society. Finally, there was the class of people who contract bad debts, going from one doctor to another, and paying none. It was well to be very suspicious of any new patient who began by running down their former medical attendant, and we should inquire whether the latter had been paid. We might find that we in turn should be deserted, and calumniated when we ventured to press for payment.

Referring to hospital abuse, the speaker expressed the opinion that inquiry regarding the patient's circumstances, either by a paid hospital official or by the doctor, was of little use, and the best solution of the question was to make hospitals as much as possible places for consultation, patients bringing letters from their own medical men. As regards clubs and under-paid Poor-law appointments, we have the remedy in our own hands, and can defend ourselves by combination. We have seen the success attending combined efforts to improve the conditions under which our colleagues serve in the Army and Navy. When all is said and done, it must be admitted that most of the disadvantages from which we suffer are our own fault.

Co-ordination, combination, and *esprit de corps*—these are what we want, and to promote these in Ulster Sir Wm. Whitla has done more than any other man, by providing the Ulster Medical Society with a house where the members will meet for professional and social intercourse.

At the conclusion of the address, which was very warmly received, the President invited the members to adjourn to the library for coffee and cigars, and subsequently a large number stayed to enjoy the amenities afforded by the rooms of the Medical Institute; billiards, bridge, and whist forming a pleasant variety from the duties of the day.

Literature.

RAYMOND'S CLINIQUE DES MALADIES. (a)

These two large volumes embody the lectures delivered by Professor Raymond at the Salpetrière, and are filled with facts and observations drawn not only from the stores of an erudition peculiarly rich with the science, ancient and modern, of many countries, but also from the experience of a clinical observer who has had ample opportunities of studying diseases of the nervous system. The subjects dealt with are numerous and diverse. In Chapter VII. he deals at considerable length with the psychic equivalents of epilepsy. Here he remarks that psychologists, by throwing themselves with the greatest enthusiam into the study of hysteria, have almost completely neglected the study of epilepsy, and that in works on epilepsy there is no trace of the innumerable modifications of conscious sensibility, voluntary movement, emotions, attention, and ideation, which are so frequent in their treatment of hysteria. After a minute description of an attack of *grand mal* and *petit mal*, he goes on to state that these attacks may be replaced by symptoms quite different, and gives three varieties:—(1) Motor psychic equivalent, (2) sensory psychic equivalent, (3) purely psychic equivalents, and numerous interesting examples are given to illustrate each of these varieties. These varieties of epileptic delirium, he states, often take a form of mania. They are extremely dangerous, and may result in criminal acts, homicide, incendiarism, theft, and outrage on decency. Another chapter is taken up with an interesting and graphic description of a case of crossed paralysis, and here he states that in the vast majority of cases of crossed paralysis a local lesion of the pons and medulla region is indicated. Chapter IX. is taken up with a description of cases of tumour at the base of the brain; here also the cases are minutely described. In Chapter XXVII. he treats of juvenile general paralysis. Treatment with mercurial inunction and potassium iodide internally he found to produce a certain amount of amelioration after a few days. Other chapters deal with the divers forms of progressive muscular atrophy, topography of the cortical centres of general sensibility, infantile, and other forms of myxœdema, &c.

(a) "Clinique des Maladies du Systeme Nerveux (Hospice de la Salpetriere)." Annee 1898-99. By F. Raymond, Professeur de Clinique des Maladies Nerveuses a la Faculte de Medicine de Paris. Quatrieme et Cinquieme Serie. 579 and 648 pp. respectively, with 136 figures and 7 Plates. Paris: Octave Doin.

The book carries with it throughout the impress of thoroughness, and of an extensive practical experience of the diseases treated therein. While recording the work of other observers, the author, whose reputation is great, has fully embodied the results of his own observations, which adds considerably to its value. Of the easy graceful style of the author, and of the good illustrations scattered throughout the work, we can but speak in terms of high praise.

OBITUARY.

SAMUEL FENWICK, M.D., F.R.C.P.

The death is announced of Dr. Samuel Fenwick, M.D., F.R.C.P., which took place on Thursday afternoon, at his residence, 29, Harley Street, Cavendish Square, at the age of eighty-one. Dr. Fenwick was born in 1821, in Northumberland, and took the M.D. degree at St. Andrew's in 1846. For some years he practised in his native county, receiving the M.D. degree from Durham University in 1859. He was lecturer on Pathological Anatomy at the Medical School of Durham University in Newcastle-on-Tyne, and on settling in London about forty years ago he was appointed Lecturer on Medicine at the London Hospital Medical College, and Assistant Physician to the City of London Hospital for Diseases of the Chest. Dr. Fenwick, who was elected a Fellow of the Royal College of Physicians, London, in 1870, was a Fellow of the Royal Medical and Chirurgical Society and a member of the Pathological Society, and was for many years Physician to the London Hospital. He was the author of many medical works and text books, among others "The Students' Guide to Medical Diagnosis," which reached an eighth edition, and "Outlines of Medical Treatment."

Medical News.

St. Thomas's Hospital.

As a memorial of their son, the late Dr. Seymour Graves Toller, Mr. and Mrs. Toller, of Scarborough, have established at St. Thomas's Hospital a prize to be maintained in perpetuity and given annually to the fifth year's student first in the examination in medicine. Dr. Seymour Toller was formerly assistant physician at St. Thomas's, and at the time of his early death in Egypt was physician to the Kasr-el-Aini Hospital at Cairo. The Governors of St. Thomas's Hospital have decided to name a new children's ward the "Seymour Ward," after their late colleague, and for its decoration Miss Jewesbury has painted eight picture panels to be affixed to the walls.

Physician's Suicide.

Dr. Stone, a well-known physician of Hull, committed suicide on the 5th inst. by taking poison. A note was found in his handwriting, containing the words: "I cannot bear scandalous reports. Good-bye all; distracted."

Expert Witness Fees.

An appeal has just been decided by the Scottish Court of Sessions in which the fees paid to a medical witness in an action for damages was challenged by the defendant railway company. The auditor had passed a fee of seven guineas, but the company urged that four guineas would have been sufficient. In the result the Court deprecated an appeal on such a trivial matter, and decided that five guineas would be a proper fee.

Catholic University School of Medicine.

In presenting the prizes, awarded in connection with the recent examinations, on Saturday last, the Dean of the School, Sir Christopher Nixon, remarked that this was now the largest medical school in Ireland, having 320 students, and had reached its present position without any recognition, financially or otherwise, by the State. The question of enlargement was now seriously engaging the attention of the faculty. He thought no Government responsible for higher education in this country could allow the Royal University to maintain its existence without a radical change in its constitution and in its relation to the colleges connected with it. In relation to medicine, it occupied a high function, and he assured his student hearers that those who held a degree from the Royal University commenced their career with a considerable bonus in hand. The prizes were:—First Conjoint Exhibition, value £12 10s., Patrick Foran; Second Conjoint Exhibition, value £10; Edward Sheridan; Third Royal University Exhibition, value £12 10s., Thomas Barry; Third Royal University Exhibition, special prize for second place, Miss Ovenden.

Contract Practice at Swansea.

The medical men of Swansea have just issued a circular putting before the members of friendly societies in the town certain points against the proposed establishment of a medical aid association. They state that they only ask for an increase from about 6s. 6d., the present average, to 8s. 8d. per annum per family.

Curious Gifts to a Hospital.

The Guest Hospital, Dudley, recently received an annoymous donation of £500 (by registered post), seven vanloads of furniture, much of it new, four pianos, and 100 pictures, the latter being valued at £350. The *Birmingham Daily Post* states that the donor is Mr. Hugh Lewis, formerly a pawnbroker of Tipton, and now residing at Sutton Coldfield.

Dublin Death Rate.

The deaths registered in the Dublin registration area for the week ending Saturday, Dec. 6th, 1902, represent an annual rate of mortality of 27·0 in every 1,000 of the population. There were 33 deaths from tuberculous disease, 15 from diseases of the nervous system, 26 from diseases of the circulatory system, and 53 from diseases of the respiratory system; 63 infants died during the week, of whom 22 were under one year old. Within the city the death rate in different districts was as follows:—Summerhill district, 38 6; Peter Street District, 30 6; Grand Canal Street district, 29·9; and Castle Street district, 51 8 in the 1,000.

London School of Medicine for Women.

The first annual dinner of the Royal Free Hospital and London School of Medicine for Women took place in the King's Hall of the Holborn Restaurant on Wednesday evening last, when upwards of 400 persons sat down to dinner, the fair sex, medical and otherwise, largely predominating. Several of the speeches were made by lady officials of the school, thus introducing a novel feature into post-prandial oratory which has hitherto been regarded as a masculine preserve. The presence of Sir W. S. Church, President of the Royal College of Physicians, may perhaps be interpreted as "a sign of the times," indeed, he formally disclaimed any feelings of hostility to the invasion of the profession by women, although he naively confessed that he had never actively fought on their behalf. Apart from the predominance of the feminine element, which was, of course, only natural, the distinguishing features of the festival were the marked prevalence of teetotal principles and the absence of the accustomed musical intervals between the toasts, an absence which was the more conspicuous in such a gathering of the fair. The success of this inaugural dinner serves to emphasise the reality and the extent of the movement, and we can well believe that it came as a surprise to some practitioners of the other sex who graced the meeting with their presence."

Notices to Correspondents, Short Letters, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in re-forwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed, to the Publisher.

HOSPITAL APPOINTMENTS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—It is noticeable in the list of medical appointments (last issue of THE MEDICAL PRESS AND CIRCULAR) that *five* gentlemen, whose names commence with the letter "H.," have been appointed as house surgeons or assistant house surgeons respectively to St. Thomas's Hospital. It is comforting to know the Governors of St. Thomas's, at any rate, do not drop their "H's"

I am, Sir, yours truly.
OBSERVER.

M. O.—If, as you suggest, death did not take place until more than a year after the accident, although presumably directly caused thereby, no inquest is necessary or could, indeed, be held. When the fatal result occurs more than a year and a day after the receipt of the injury it is assumed at law to be due to some other cause

EXPERT.—We cannot undertake to find out when the articles in question were published. especially as you are not sure of the titles If you will look them out and furnish us with the dates we will ascertain whether the numbers are still in print.

ANÆSTHETIST.—It is difficult to lay down any hard and fast rule as to what is or what is not fit matter for discussion in the lay Press. It is greatly a matter of taste, but the fact of the subject possessing a medical interest is not of itself a bar to public discussion. Prospective patients are at least as much interested in methods of treatment as are medical men, though obviously they may not be in a position to discuss them with advantage.

M. R. S.—As a rule it is unadvisable to give food by the mouth if rectal alimentation is being employed. The addition of a little salt to the beaten-up egg facilitates absorption. A very good formula is a egg beaten up in fully peptonised milk, to which may be added brandy or whiskey, along with a few drops of laudanum to check irritability of the bowel.

CLIPPINGS FROM LAY EXCHANGES.

A RAPID RESURRECTION.

EVANSVILLE, Ind., April 13th.—"Last night, ——, 40 years old was brought back to life by the injection into her arm of a half-pint of salt solution. The patient was taken to a local hospital for an operation, after which the physicians discovered that her heart had ceased to beat . . . . five doctors pronounced her dead. As a last resort a vein in the right arm was opened, and the salt solution injected. In three seconds the patient arose on the operating table and asked for something to eat."—*Chicago Record-Herald* April 14th, 1902.

TU QUOQUE.—We submitted our correspondent's letter to the writer of the article, who states that the facts were obtained from the report published in a local newspaper, the accuracy of which he is in no wise disposed to endorse.

H. F. M.—In Western Australia the Medical Board impose a poll tax of ten guineas on all qualified members of the profession. No such tax is imposed in Queensland or South Australia. The payments are devoted to the expenses of the Board and the prosecution of quacks, and if the latter function is properly carried out even this large demand may not be without its compensation. Here medical men pay no annual fee and they are left unprotected.

Meetings of the Societies, &c.

LONDON.

WEDNESDAY, DECEMBER 17TH.

BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY (20, Hanover Square, W.).—8.30 p.m. General Meeting. Treasurer's Balance Sheet for the past Session. Ordinary Meeting. Paper:—Dr. P. Lewis (Folkestone): Convalescence. 10 p.m. Conversazione at the house of the President (Dr. Symes Thompson).

THURSDAY, DECEMBER 18TH.

HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Titchborne Street, Edgware Road, W.).—8.30 p.m. Clinical Evening. Cases will be shown by Dr. W. T. Harris, Mr. P. L. Daniel, and others.

MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies Street, W.C.).—5.30 p.m. Mr. Cantlie: Plague. (Surgical).

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Tottenham Hospital, N.).—4 p.m. Clinical Lecture:—Dr. A. Giles: The Symptoms and Diagnosis of Extra-Uterine Pregnancy.

DUBLIN.

FRIDAY, DECEMBER 19TH.

ROYAL ACADEMY OF MEDICINE IN IRELAND.—Medical Section. Exhibits.—Dr. C. M. O'Brien: Cases of Lupus treated by the Finsen Method. Papers.—Dr. Joseph O'Carroll: A Case of Paroxysmal Lachycardia. Dr. C. M. O'Brien: The Treatment of Lupus by the Finsen Method. Dr. Walter Smith: (*a*) On the Occurrence of Leucine as a Bulky Urinary Deposit; (*b*) On a Reaction between Urea and Formaldehyde, and its Chemical Significance. Mr. R. C. B. Maunsell: The Diagnosis of Perforated Gastric Ulcer. Dr. G. Peacocke: A Case of Splenic Anæmia.

Appointments.

ATKINSON, HAROLD WILLIAM, L.R.C.P.Lond., M.R.C.S.Eng., Junior Resident Medical Officer to the North-West London Hospital.

BADCOCK, AUSTIN, M.B.Lond., House Surgeon to the Throat and Ear Hospital. Brighton.

BADCOCK, C. H., B.A.Cantab., M.R.C.S., L.R.C.P., House Surgeon to Teignmouth Hospital.

BLUMFIELD, J., M.D.Camb., Anæsthetist to the Hospital for Epilepsy and Paralysis, Maida Vale.

EVANS, D. HAYDN, Senior House Surgeon to the Royal Portsmouth Hospital.

HARRIS, W. J., M.B.Cantab., M.R.C.P.Lond., Physician to the Out-patient Department and Registrar of the Hospital for Epilepsy and Paralysis, Maida Vale.

HENDERSON, R. G., M.A., M.B., Ch.B.Aberd., F.R.C.S.Edin., Honorary Anæsthetist to the Liverpool Stanley Hospital.

JEFFRIES, HORACE, M.R.C.S., L.S.A., Honorary Surgeon to the Bolton Infirmary.

MYERS-WARD, C. F., M.R.C.S., L.R.C.P.Lond., Lecturer in Physiology to Charing Cross Hospital.

NIXON, JOHN ALEX., B.A., M.B., B.C.Cantab., House Physician to the Bristol Royal Infirmary.

SHERREN, JAMES, F.R.C.S.Eng., Assistant Surgeon to the London Hospital.

Vacancies.

Bristol General Hospital.—House Surgeon. Salary £120 per annum. Board, residence, &c. Applications immediately to the Secretary.

Brown Animal Sanatory Institution.—Professor-Superintendent. Salary £250 per annum. Applications to the Secretary. (See Advt.)

Essex and Colchester Hospital.—House Surgeon. Salary £100 per annum, with board, washing, and residence in the Hospital premises. Applications to C. L. Becher, Secretary.

Great Yarmouth Hospital.—House Surgeon. Salary £90 per annum, with board, lodging, and washing Must be able to give Elementary Lectures to Probationer Nurses (for which £10 extra will be paid). Applications to Richard F. E. Ferrier, Hon. Secretary, 33, Hall Plain, Great Yarmouth.

North Staffordshire Infirmary and Eye Hospital, Hartshill, Stoke-upon-Trent.—House Surgeon. Salary £120 per annum, with furnished apartments, board, and washing. Applications to the Secretary and House Governor.

Rochdale Infirmary.—Resident Medical Officer. Salary £100 per annum, with board, residence, and washing. Applications to R. W. Shaw, Esq., Southfield, Rochdale.

Royal South Hants and Southampton Hospital.—House Physician. Salary £100 per annum, with rooms, board, and washing found. Applications immediately to T. A. Fisher Hall, Secretary.

The Cancer Hospital, Fulham Road, London, S.W.—Junior House Surgeon. Salary £70 per annum, with board and residence. Applications to the Secretary. (See Advt.)

Watford Joint Hospital Board.—Matron. Salary £100 per annum, with board and residence. Applications to the office of the Board, Watford Place, Watford.

Wrexham Infirmary.—Resident House Surgeon. Salary £100 per annum, with board, washing, &c. Applications immediately to Stanley D. Edisbury, Secretary.

Births.

MAGUIRE.—On Dec. 13th, at Glengarriff, Kew Road, Richmond, Surrey, the wife of George J. Maguire, M.B., B.A.O., of a daughter.

ROWAN.—On Nov. 24th, at Lebong, Darjeeling, the wife of Major Rowan, R.A.M.C., of a daughter.

Marriages.

BATEMAN—ROBERTS.—On Dec. 11th, at the Parish Church, Lampeter, Francis John Harvey Bateman, M.A., M.B., of Heath End, Blackheath, S.E., son of Sir Frederick Bateman, M.D., LL.D., of Norwich, to Bertha Isabel, daughter of the late Hugh Roberts, of Llanwrest, N. Wales.

BROWN—VENABLES.—On Dec. 11th, at St. Mary's Church, Kidlington, John Brown, L.R.C.P., L.R.C.S.I., Knight of Grace of the Order of St. John of Jerusalem, late Surgeon R.N., Lavender Gardens, S.W., to Elizabeth (Bessie), daughter of the late James George Venables, of Oxford.

PURSER—O'BRIEN.—On Dec. 9th, at Adare Church, by the Lord Bishop of Limerick, assisted by the Rev. Lucius O'Brien, Francis Carmichel, only son of William Purser, 3, Winton Road, Dublin, to Lucy Mabel, eldest daughter of Rev. Lucius O'Brien, Rector of Adare.

UNDERWOOD.—FAIRCLOUGH.—On Dec. 11th, at St. James's Church, Barton-under-Needwood, Arthur Cressèe Underwood, M.R.C.S., &c., son of the late William Elphinstone Underwood, of the Indian Civil Service, Madras Pres., to Phyllis Maude, younger daughter of the Rev. W. H. H. Fairclough, Vicar of Barton-under-Needwood.

Deaths.

CRAWFORD.—On Dec. 12th, James Crawford, M.D., M.R.C.P., late of Ightham, Kent, son of the late Rev. Hugh Crawford, M.A., of Killashee, co. Longford.

FENWICK.—On Dec. 11th, at 29, Harley Street, London, Dr. Samuel Fenwick, Consulting Physician to the London Hospital, aged 81.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

VOL. CXXV. WEDNESDAY, DECEMBER 24, 1902. No. 26.

Original Communications.

ON PROLAPSUS UTERI

WITH SPECIAL REFERENCE TO

AN OPERATION FOR REPRODUCTION OF THE SACRO-UTERINE LIGAMENTS. (a)

By E. STANMORE BISHOP, F.R.C.S.Eng.,
Hon. Surgeon, Ancoats Hospital, Manchester.

THE operation described in the transactions of the British Gynæcological Society, for May, 1901, by Mr. Bowreman Jessett, was one dealing with the sacro-uterine ligaments.

The procedure which I desire to bring before you to-night differs from the one so described, not only in some points of technique, but essentially in its aim, and the result produced. Mr. Bowreman Jessett seeks to produce, and succeeds in producing a return of the uterus to its normal level in the pelvis, and fixes it there—fixes the cervix to the sacrum behind, and the fundus to the abdominal wall in front. So long as the adhesions which he makes between these structures hold good, the uterus is rigidly retained in position, and I conceive is unlikely ever again to prolapse—but the aim and result of his operation is firm fixation with little or no improvement afterwards of the organ so fixed.

The aim of the operation I am about to describe is quite different to this; it is to obtain, as nearly as possible, a return to the normal condition, and I should like to emphasise this phrase "a return to the normal" because I believe that we have, at the present time, a right to expect such a return in these cases. It is to be noted that we have to deal in this deformity, not with the ravages of disease, leaving behind them alterations in structure which render such a return impossible, or actual losses of tissue which cannot be replaced, but with the results of injury, of traumatism, which is not necessarily followed by either of these, which leaves the parts affected in new relations to one another, it is true, but beyond this, in most cases, but little altered intrinsically, and therefore simply necessitating the repair of the results of such injury in order to restore the patient to the *status quo ante*; and this, I believe, in the majority of instances to be perfectly practicable.

Therefore we need first of all a definition of the normal uterus, and I offer this as practically useful for the purposes of this paper.

The normal uterus is one which is free to move in every direction within certain limits, but not beyond, and which is capable of development in all its parts during a succeeding pregnancy. In order to make what follows clear permit me very briefly to draw your attention to some points in the anatomy of this region. The general anatomy is, of course, perfectly well understood by all present, but there are certain things upon which fresh light has lately been thrown, and these are, I think, worth consideration.

The uterus is a muscular body with muscular offshoots, ending in tendons, the latter blending with the periosteum of the pelvis, at four points of which the two anterior are opposed to the two posterior. These muscular offshoots are much longer in proportion to their width, and so permit of the free movement of the uterus within certain well-defined limits. They are the true ligaments of the uterus, and by their periosteal attachments, they support the uterus at a normal level, and prevent prolapse. These true ligaments are the round or fundo-pubic ligaments in front, and the sacro-uterine, sacro-genital, recto-uterine, or retro-sacral (for by all these names they are described by various authors) ligaments behind.

Attached to, and swinging from, the periosteal insertions of these true ligaments to the bony pelvis, the uterus is free to move within certain limits, but not beyond. It is also perfectly free to develop in all its extent during pregnancy. If we wish to restore the uterus to a normal condition we must, therefore, so act as once more to leave it free to move within normal limits, but not beyond, and to develop in its whole extent during any succeeding pregnancy.

I need say nothing of the round ligaments. The sacro-uterine ligaments are musculo-tendinous offshoots of the uterus, and are therefore true ligaments, although small, and covered by peritoneum in such a way that their actual character at first sight may escape recognition.

Before the cervix, and with it the uterus, can descend; still more before they can be extruded as we see them in procidentia, these musculo-fibrous bands—the utero-sacral ligaments—must be weakened, relaxed, or torn through.

Besides these true ligaments of the uterus, upon the integrity of which, I contend, the maintenance of its normal position depends, there is another and broader attachment of the uterus, that namely, to the bladder, which at first sight would seem to have much to do with its retention at a proper level. But, firm as this connection is, its value is greatly discounted by the mobility of the bladder itself; an organ by no means firmly attached to its surroundings; and the posterior wall of it, to which the uterus is connected, being a structure which is continually varying in its position as the viscus of which it is a part is filled or emptied. Everyone's experience of prolapse, and still more of procidentia is that in such cases the bladder loses its own position, and is dragged downwards by the descending uterus. Indeed, the converse theorem might be far more safely held, that the bladder depends greatly for the maintenance of its normal position upon its attachment to the uterus, and through it upon these sacro-genital ligaments, than *vice versâ*. Such a theorem would obtain additional support from the fact that Professors Dixon and Birmingham describe these sacro-genital ligaments as existing also in the male. In male subjects they are attached anteriorly to the base of the bladder, and assist materially in its retention in the normal position.

The broad ligaments are usually considered, but, I confess, I think without good reason, to be among the more important structures which maintain the uterus at its normal level. We cannot rely at all upon merely periosteal attachments to prevent or restrain prolapse so that the value of the broad ligaments for this purpose is a negligible quantity.

(a) Read at the meeting of the British Gynæcological Society, December 11th, 1902.

There are certain other things, the importance of which have been very generally emphasised by authors, as more or less subsidiary factors in this question. Such are :—

1. The angle at which the uterus lies with reference to the vagina.

2. The potentiality of the vaginal canal, as opposed to the idea of an actual space beneath the uterus.

3. The action of the levator ani, pelvic fascia, and transversi perinei muscles in maintaining such potentiality, and converting an actual canal into a valvular slit in the tissues.

4. A postulated balance between intra-abdominal pressure and the external atmospheric pressure.

But, such a case as the following (counterparts of which must be in the memory of all operators here present) demonstrates that all these subsidiary factors may be absent or non-effective, and yet, so long as the true ligaments of the uterus are intact, that organ will not descend.

Mrs. M., æt. 51, a washerwoman, came to Ancoats Hospital in July of this year, with the complaint that her womb was coming down. She had had two children, the eldest of whom was twenty-seven years old. It had been a severe labour, necessitating the use of forceps, and she attributed all her troubles to this confinement. The womb began to come down, she said, as soon as she began to go about. On examination the perineum was found to be entirely absent; the sphincter ani split, and the vagina and rectum had a common opening, divided about half an inch above the skin level by a narrow band, the combined edge of the rectal and vaginal mucous membranes. There was marked rectocele and cystocele, but the finger, passed up the vagina, found the uterus in its normal anteverted position, and at its normal elevation in the pelvis. Thus, although all subsidiary factors had been ineffective for twenty-seven years, and the patient had been engaged in a laborious occupation, necessitating much standing, the uterus itself had not prolapsed, its intrinsic ligaments being intact.

Incidentally, and inasmuch as all these patients describe their condition in the same way as a "falling of the womb," this case emphasises the necessity of differentiation, for operative purposes, between true uterine descent and mere prolapse of the vaginal walls, for the latter of which conditions the operation of reproduction of the sacro-uterine ligaments is not required or suitable.

Returning to the true ligaments of the uterus, I think a few moments' consideration will show that of the two sets, the fundo-pubic and the sacro-uterine, the integrity of the latter is of by far the greater importance. Their relative shortness, the positon of their implantation below the main bulk of the uterus, their coordinate action with the vesical attachment in front, all render them more effective in maintaining the uterus in its normal position than the comparatively longer, round ligaments, which act upon the fundus. Indeed, as it were instinctively, practitioners have, in all measures short of operative interference, always acted upon these facts. Where the perineum and its contained muscular fibres are intact, and often when they are not, pessaries have been used, designed apparently with the one idea of replacing or shoring-up these sacro-uterine ligaments. I do not refer to rings or inflatable ball pessaries, which indeed are mere mechanical plugs, but to those pessaries which act upon a scientific basis—Hodge's, Thomas', and their modifications. These all act in this way, although their action has been otherwise explained and justified. They support weakened and relaxed sacro-uterine ligaments, and, if these are not torn through, the support and rest so obtained may, and indeed often does, permit of the latter's regaining their normal strength and tone, and so the patient may be cured by the use of these appliances. When these ligaments are torn, the upper bar of the instrument to some extent replaces them. In the first instance, after a certain time the pessary may be disused; in the second, it will always require to be worn, and this I conceive to be the reason why some cases will apparently be cured by pessaries worn for a sufficient length of time, whilst others can never dispense with their presence. Of course the integrity or otherwise of the other ligaments, and of the perineum, are large factors in any given case, but not, I contend, of the primary importance which belongs to the sacro-uterine ligaments.

But if this is true of cases treated by measures short of operation, how is it then that when operative interference is undertaken the importance of these posterior ligaments is so entirely ignored?

The reason, I believe, is to be found mainly in the conditions under which operations have been evolved. When first surgeons attempted to remedy this defect it was not possible, as it is now, to control all the routes by which the uterus might be reached. The sacro-uterine ligaments are deeply seated and difficult of access. Moreover, in all the old text-books of anatomy as we have seen they are described as mere folds of peritoneum. Not only is mere peritoneum useless, but to the pre-antiseptic surgeon the peritoneum was forbidden ground. It was the one structure in the body above all others to be avoided. Even in operating on herniæ, where it is now recognised as so all important that the condition of the constricted, gut should be known, the peritoneal sac in those days was opened only as a last resource, and operations were planned, and instruments such as the old hernia knife and director, constructed for that one all important purpose to avoid opening the peritoneal cavity. Naturally in those days, no attempt was made to interfere with the ligaments, and all operators busied themselves with attacks upon the uterus through the one avenue open to them, the vagina, and upon the one structure with which they believed that they could safely deal, the vaginal mucous membrane. It was not then a question as to what was the ideal treatment, it was a question of what was possible under the then existing conditions.

When an attempt was first made to shorten elongated and lax ligaments, those of which the ends lay outside the peritoneum, and could be dealt with without invading that cavity, were naturally the first to be attacked, and the operation for shortening the round ligaments was devised. In cases of retroversion or retroflexion, it has done extremely good work and will continue to do so; but it is curious to note that the importance of the genito-sacral ligaments was fully recognised by Alexander himself, who instituted this operation, although he and those who followed him made no effort to deal with them by operation. In his "Practical Gynæcology," p. 61, he says, "The Hodge, or the Hodge and stem, according to the nature of the case, are always introduced just before the operation is commenced. The Hodge should be fairly large so as to push the cervix well back and relax the posterior uterine ligaments. . . . The stem is removed at the end of the third week. . . . Where there is a weakened perineum, a tendency to cystocele or rectocele, or distinctly relaxed retro-sacral (*sic*) ligaments, the perineum must be fortified at the same time that the round ligaments are shortened, or a Hodge's or other pessary, as an inferior support, will require to be permanently worn."

Useful as this operation on the round ligaments is in cases of retro-deviation, its inefficiency in cases of prolapse and procidentia is evident *a priori* from the very conditions of the problems involved, and is equally evidenced in practice by the numerous fixations which have been in vogue of late years. A pull from the uterine cornu towards a fixed point in the pelvis on the same, or but very slightly higher, level can never raise the whole body of the uterus to any great degree; still less if the posterior supports are gone can it raise and carry backwards the cervix. It will then simply draw the uterus forward towards the pubes, and so place it in a still more favourable position for further descent. And recognising this, surgeons who had overcome by that time all dread of an open peritoneum seized the uterine body, and, drawing it bodily forward and upward, fixed it to the nearest point which offered resistance, the abdominal wall above the pubis. But such ventro-fixation materially interferes with the proper development of the anterior uterine walls in any subsequent pregnancy; and so it became a matter of great importance to show cases which in spite of this had carried a fœtus to full time development. Several such cases are now on record, but whilst it has thus been shown that such a result is possible, cases are also on record in which abortion has occurred repeatedly, others in which the resulting parturition has been greatly impeded, and others in which death has resulted. It is human nature that successful cases should be emphasised, and that those which have ended badly should be frequently unreported. The more honour to those authors who have faithfully recorded their failures; but none the less the departure from a normal condition induced by this operation and its results stands out clearly. No operator who has performed a ventro-fixation, and still less the practitioner to whose unlucky lot it may fall to attend a patient through the succeeding period of irregular dilatation of the uterus during pregnancy, and the equally risky parturition, can feel happy or secure until this severe test is well over, however triumphant they may appear afterwards. If nothing nearer to a return to the *status quo* is possible, the method with all its drawbacks may in some cases be justified—in women past the child-bearing period, for instance—but if better methods can be carried out, methods which attain more nearly to a restitution of the prolapsed organ to its original position and condition, then the supposed necessity of this plan loses it *raison d'être*.

I have myself performed a large number of ventro-fixations, and besides the objections already mentioned, another has been strongly impressed on my mind. The portion of abdominal wall to which the uterus has been attached, although relatively a fixed point, is not so absolutely. Months after the fixation has been carried out, the area of fixation will be found sunk inwards, drawn backwards and downwards by the weight of the attached organ, which will have sunk again to a much lower level than that at which it appeared at the time of operation to be located, so that the final result, even so far as the mere elevation is concerned, is not so satisfactory as at first would seem to be the case. The bladder in many of my cases also was compressed to some extent; its capacity decreased, so that the patients were troubled by undue frequency of micturition, and an inability to restrain themselves for any length of time when desire to urinate arose.

I do not mention vagino-fixation except to condemn it. I have practised it in one case, but should never again attempt it. The principle upon which it is based is, I think, false, and its results, so far as I have seen them, are deplorable. There is, moreover, one comprehensive objection to all these operations, and it is, to my mind, a very forcible if not a fatal one. Consider for a moment the symptomatology of this condition. In the very earliest period of prolapse and increasing *pari passu* with it, pain and a sense of dragging weight is felt in the lumbo sacral region. The uterus, as it descends, usually becomes more bulky, and many of the discomforts experienced are attributed to its increased weight. This is doubtless true, but for the full explanation I conceive that we must go still further back. The nerves of the uterus are derived from the inferior hypogastric and spermatic plexuses of the sympathetic system, both of which lie on the posterior concave wall of the pelvis, behind the peritoneum, and closely applied to the periosteal surface, as well as from the third and fourth sacral nerves of the spinal system. So long as the cervix maintains its normal position with regard to the posterior pelvic wall, so long there will be no tension upon these nerve filaments, but immediately that position is altered by the rupture of the genito-sacral ligaments which keep it in due apposition, tension on these nerve-fibres will commence, and increase with every degree of departure from its normal proximity to the sacrum.

Again, the veins which return the blood from the uterus, the uterine veins, follow the course of the uterine arteries. Now, it is well known that traction upon the uterus in a downward direction will so kink and narrow these arteries, that section of the uterus may be made through its entire extent without loss of any appreciable amount of blood so long as that traction is kept up, though the cut surfaces will bleed freely if the uterus is allowed to resume its normal position. The less resistant and much thinner vein wall will be still more easily affected by descent produced by any cause. As the blood current in these veins is delayed, hyperæmia of the organ must necessarily ensue, and the uterus becomes heavier still. Such increased weight leads to increased obstruction, and a vicious circle is formed, escape from which is only possible by the restoration of the organ to its normal plane and its retention there.

From this point of view a review of the various operations practised, brings out still more plainly their inefficiency.

Amputation of the cervix, which I have omitted, since I can discover no valid reason for its practice, although it may decrease the actual weight at the moment, can never re-approximate the lower part of the uterus to the sacrum, and so relieve tension in the nerve fibres supplying that organ.

And the same objection applies to any operation upon the mucous membrane of the vagina, or upon the perineum. I believe that the words I have quoted from Mr. Bowreman Jessett in the introduction of my thesis are absolutely true, and that slowly but surely, the weight of the heavy uterus above, acting as a wedge, will open up again the passage beneath, which you have temporarily narrowed, however ingeniously you may have done it: and it is evident that even immediately after operation, you have not reproduced the normal relation of the cervix to the sacrum.

The same precisely may be said of Alexander's, Olshausen's, or any of the other operations which deal solely with the round ligaments.

Ventro-fixation will certainly relieve the venous hyperæmia by taking off the narrowing strain upon the blood vessels of the uterus, but it cannot in any way replace the cervix in its normal relation with the sacrum, and so restore the nerve filaments to their normal freedom from tension.

One last operation has been practised for the relief of this condition, and surely we are justified in considering it the last effort of despair. This operation was described by Professor Edebohls, at the Manchester meeting of the British Medical Association in July. When all else fails, this operator removes the uterus, and with it the mucous membrane of the vagina down to the vulval edge. Then he unites the bared connective tissue between the bladder and urethra on the one side, and the rectum on the other by a series of purse-string sutures, beginning at the peritoneal opening, pushing this up, and placing another immediately beneath. Proceeding in this way until he reaches the skin, this also is united, and a continuous perineum is thus produced, as in the male from the anus to the urethra. He adds, very properly, that the result must be carefully explained to the patient before submitting her to this transformation.

It is, I think, evident that none of the operations I have described, and which comprise all those at present in use for the cure of procidentia or prolapsus uteri can fairly be described as producing a return to the normal condition, but that they are, on the contrary, simply substitutions of one abnormal and deformed state for another. The change may be, and doubtless often is, an improvement on the original, but it is not and cannot be a reproduction of the *status quo ante*.

As I have endeavoured to show, the genito-sacral ligaments though small, are all important in maintaining the normal position of the uterus; in cases of prolapse, and *a fortiori*, in those of procidentia they are relaxed, lengthened, and in many instances torn through. In the slighter cases, the support of a properly fitting pessary by allowing rest and time for them to recover tone, will be all that is required, but in severer instances, where they are absolutely torn through, no amount of rest will bring about their reunion. Torn muscular fibre retracts and atrophies from disuse; in the case of small muscles such as these a few months will suffice to render them practically indistinguishable from the connective tissue in which they lie. Can anything be done to replace them, to once more afford stability to the postero-inferior segment of the uterus in its normal position?

Here it is well again to emphasise the importance, if we are to restore the uterus to its normal position and condition, that it should be free to move within certain limits. If absolute fixation of the anterior and superior wall of the uterus is faulty, still more would absolute fixation of its postero-inferior segment be injudicious, since the normal descent of the cervix in parturition would be prevented, and the escaping fœtal head would find itself opposed by the immovable wall of the sacrum, coccyx, and the firm fibrous structures spreading from them both. At the same time an attachment must be contrived which will be firm and permanent. For a fixed point the aponeurotic structures covering the anterior surface of the sacrum applies a perfectly satisfactory and sufficiently broad area for choice. In choosing the particular point the ureter and rectum must be carefully avoided. Both lie over these structures, and beneath the peritoneum. Both are easily recognisable. So also are the nerve strands which form elevated flattened ridges. It is wise also to choose a point fairly free from vessels. The main vessels—the common and internal iliacs—are too far out for any uneasiness on their account. I have found that a point between the rectum on the inner side, and the ureter on the outer, is well adapted for the purpose. As to the height vertically on the surface of the sacrum, the manner of selecting this will be dealt with later. It will vary with almost every case.

In old cases of procidentia, as I have already pointed out, it is useless to search for the remnants of the original ligaments. They will have atrophied, and even if they could be found after a long and difficult dissection, the result of which would be needless damage to the tissues involved, they would be useless for reparative purposes. Whilst this is especially true in such cases, it is also true in minor cases of prolapse. Bovée, in the *American Journal of Obstetrics*, July, 1902, however, claims to have found and united the torn ends of these ligaments, both from the vaginal and from the peritoneal aspect. Personally, I believe that in every case this is a mere waste of time, and exposes the patient to needless risks. Like Mr. Jessett, I do not attempt a dissection, which must be extremely difficult, and is, from the very conditions present, foredoomed to failure; but seek to substitute something which will act in the same way, which is easily accessible, and which is sufficiently firm to be trustworthy.

It will, I think, be evident that in the upper extremity of the posterior fornix, a sufficiently firm resistant material is available, which, whilst firmly attached to the cervix, yet is of sufficient length, between its most superor point and that blended with the latter, to permit of normal movement. It is this which is utilised as the new sacro-uterine ligament.

The technique of the operation as I have carried it out is briefly this. The protrusion being reduced, the patient is placed in the extreme Trendelenburg position and the abdominal wall is opened by a median incision. As soon as the intestines have sunk away from the pelvis towards the diaphragm two threads are passed through the broad ligaments, one on either side of the uterus enclosing tube and round ligament; the ends of these threads are tied, and by them as tractors the fundus of the uterus is drawn forwards. A special sound is passed by an assistant into the vagina and made to press up towards the posterior fornix so as to render it prominent. On either side a stout thick thread is passed vertically through the substance of the fornix, avoiding the mucous lining, so that each protruding end is half an inch distant from the other and the whole loop half to three-quarters of an inch from the cervix. The fornix is now applied to the sacrum, and a spot is chosen directly opposite, free from vessels and subjacent nerves and ureter, and well outside the rectum, where the needle carrying this suture is entered deeply so as to embrace the periosteum covering the bone; it is brought out again half an inch directly above its point of entrance. Before tying this suture, a narrow strip of peritoneum is removed from that portion of the fornix which lies in its grip, so as to bare the connective tissue beneath. This is repeated on the opposite side; the sutures are tied and their ends cut short. Sometimes the position of the rectum will only permit of single fixation. This should then be more central in its position as regards the uterus and somewhat broader. The new ligament or ligaments are now formed, and the cervix hangs in its normal position from the sacrum by that portion of the vagina which lies between it and the sutures. The traction threads through the broad ligaments are now removed. As in all cases of procidentia the round ligaments have been also greatly lengthened; they are now shortened by Olshausen's method. But it is important not to shorten them to their fullest extent, so as to permit of some play still being left, so that the uterus may rise with the filling of the bladder beneath, as in the normal condition. For this part of the work Doyen's pubic retractor is very useful, giving as it does a clear view of these ligaments, and of their points of exit from the pelvic cavity. I have found it to be rather in the way in the earlier stage, so that I only introduce it after the new sacro-uterine ligaments have been made. After shortening the round ligaments it is removed and the abdomen closed. The position of the uterus and vagina is now as nearly that which obtained before prolapse began as possible, whilst the uterus itself is perfectly free to move within normal limits, perfectly free to develop in its entirety.

This manœuvre does not, of course, exclude or attempt to take the place of perineoraphy, if this should be necessary; but any repairs of this kind I prefer to carry out at a later sitting: about fourteen days afterwards if all goes well. Of all the methods by which perineoraphy can be carried out Tait's appears to the author to be the most rational, with certain modifications, but these are outside the scope of the present paper.

I have now performed this operation upon ten patients. Although the number of cases is but small, yet I conceive that they are sufficient to show not only the practicability of the operation, but the good results to be expected from it. Its claim to be a rational attempt to attack the problem of prolapsus uteri in a scientific manner will rest upon the due consideration by operators of the anatomical conditions present in these cases, and their appreciation or otherwise of the various arguments I have endeavoured to set before you. The mortality has been, and I think ought to be in all cases, *nil*, since, as I repeat, we are dealing not with a morbid but with a traumatic condition. The time is as yet too short for any evidence as to the permanence of the results obtained, and it may be said that it would have been wiser to wait until such evidence was available. As to that I believe that the operation contains within itself the essentials of permanency and now that the existence and importance of the sacro-uterine ligaments is recognised, it is inevitable that in the present era of surgical activity operations for their reconstruction will be devised all over the world.

OBSTRUCTIVE DYSMENORRHŒA.

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Dr. Duke, in a paper with the above title, asks me a question, and expresses his disagreement with a statement of mine. The statement from which he differs is that the best local treatment of spasmodic dysmenorrhœa is dilatation by bougies. He quotes Mr. Lawson Tait, and says that he agrees with him, to the effect that dilatation "means sitting by the bedside of the patient for hours, and exercising a deal of force to the exhaustion of himself as well as the infliction of much pain on the patient."

It is evident that Dr. Duke and I are not talking of the same thing. The dilatation that I practice and advise does not occupy the surgeon for hours, or require great force, or exhaust the operator. It causes pain, which an anæsthetic will prevent. I know that in one case the effect of a single dilatation has lasted twenty-two years.

I hope Dr. Duke will not think me discourteous when I say that I do not intend to use his spiral wire stem, nor any other stem. These instruments have been in use for over half a century. Many deaths have been caused by them, and many more women have been made chronic invalids. I would recommend those curious to know the effect of treatment by intra-uterine stems to read reports of cases by Dr. Henry Savage and others, in the "Transactions of the Obstetrical Society of London," vol xxii., 1880, p. 203 *et seq.* Although these stems have been in use so long no one has ever yet published a plain account of a series of cases treated with intra-uterine stems and watched for long periods. I believe that the reason for this is that those who watch the after-history of their cases carefully enough to enable them to compile a complete table of results soon come to discontinue the use of intra-uterine stems.

I cannot agree with Dr. Duke that endometritis is commonly observed in these cases. Most cases of severe dysmenorrhœa are met with in healthy young women, in whom there is, in my judgment, no sufficient ground for thinking they have endometritis. I know that "endometritis" is a word used very loosely, and that persons may be found who will conclude that any woman with a little "whites" has got endometritis. I know also that an intra-uterine stem is a very effective cause of endometritis.

I have not used any more rapid dilator than the successive passage of bougies of increasing size. I know that there are instruments made to stretch the os uteri by forcing apart certain points in its wall, but I use them not. It is impossible to know how much force is applied with such instruments. They tear instead of stretching the cervix. Therefore I use them not.

I congratulate Dr. Duke on his ingenuity in inventing new instruments; but I think, as Sydenham did of drugs, that what we want is not new instruments, but more perfect knowledge of the effect of those we have.

THE SYMPTOMS AND DIAGNOSIS OF TUBERCULOUS PERITONITIS.

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The task set me of opening the discussion on the symptoms and diagnosis of tuberculous peritonitis is a very important one, and personally I should like to give it a much more definite and prominent position than that which it occupies in text-books. The symptoms are very vague and indefinite, and there is not one which is pathognomonic. So frequently the disease is not recognised in its early inception, nor in fact until it is well developed, and often not even until the surgeon's knife is called into play. In the present day exploratory operations are so simple, and afford such excellent opportunities for the surgeon interfering with the work of the physician, that I am afraid we do not always cultivate our various senses to the extent that we should do, otherwise we would not so frequently require the assistance of the surgeon to complete our diagnosis. We can talk very glibly about the pathology and surgical treatment of tuberculous peritonitis, but I am inclined to think that if we recognised the disease, and properly treated it in an early stage, there would be fewer cases requiring operation.

The frequent failure to appreciate the development of such an important affection is, I think, partly due to the prevalent idea that peritonitis is a disease attended by severe and well-marked symptoms, whereas we know that in tuberculous peritonitis the onset is very insidious, and often there is little or no inflammatory reaction, so that in many cases, tuberculosis of the peritoneum would be a more appropriate designation. No doubt in many cases there is a considerable amount of inflammation, but rarely, if ever, to such a degree as that associated with the introduction of other micro-organisms, such as the bacillus coli, streptococci, pneumococci, &c.; there is none of that collapse associated with paralysis of the splanchnic area, such as occurs in perforation of the bowel with escape of its contents into the peritoneal cavity, and which makes such a permanent impression on the sensorium of the observer that he is apt to overlook the milder and more chronic form of tuberculous peritonitis.

This affection may occur at almost any age, but is rare under three and over fifty, and as a rule its existence is the more readily recognised, or at least suspected, the younger the patient. Its incidence is about equal in both sexes. The disease may be acute or chronic, primary or secondary; the acute and primary are rare affections, while the chronic and secondary are comparatively common. The acute form is usually part of a general acute miliary tuberculosis, and as there is no true inflammatory reaction of the peritoneum the symptoms are submerged by the more pronounced signs of disease in the lungs and bowels. However, if the patient live long enough, attention may be drawn to the peritoneum by a slight increase in the size of the abdomen with general emaciation; there may be a small amount of free fluid in the peritoneal cavity, as in these cases the adhesions consist of a slight amount of lymph, glueing the coils of bowel together. The abdominal walls become rather tense, though there can scarcely be said to be any severe pain or tenderness, and the respirations are thoracic.

The temperature is usually rather high, and may be hectic, but that depends on the involvement of other organs rather than of the peritoneum. If meningitis terminate the scene the scaphoid abdomen does not occur.

The primary form is rare, though, like meningitis, it may occur. As a rule an original focus can be discovered at the autopsy, most frequently in the bowel or generative organs and their adnexa. I have, myself, seen the origin of a general acute miliary tuberculosis in a caseous testicle, and those who treat female diseases know what a frequent source of general infection may be found in the tubes and ovaries. The symptoms in these primary cases in no way differ from those in chronic cases, which I am about to describe.

In chronic tuberculous peritonitis the symptoms usually begin very insidiously, and as commonly the lungs, pleuræ or bowels are affected, our attention may be drawn away from the peritoneum, though in fact those primary lesions should drive our observations more closely to the significance of an enlarging abdomen.

Just as in tuberculosis of the lungs, when tuberculous ulceration of the bowel follows the prominent chest symptoms subside, so when tuberculous ulceration of the bowels is followed by peritonitis the diarrhœa and attenuated abdomen may be replaced by constipation and slight abdominal intumescence; this latter condition may give a rotundity to the abdomen which, taken in conjunction with the cessation of diarrhœa, may give rise to the erroneous impression that the patient is improving, whereas in reality the disease is extending. Pain is by no means a prominent symptom in any stage of the disease, but usually a certain amount of tenderness can be elicited on manipulation; there may not be sufficient to give rise to any expression of pain beyond that depicted on the countenance of the dull and listless patient. He is careful in his movements to avoid all jars and knocks, and when in bed is apt to lie huddled up, provided the abdomen be not much distended; these facts, coupled with thoracic breath ing, which is an early symptom in all such cases, should arrest the attention of every intelligent observer at an early stage of this affection. At first the appetite may be good, but after a little it becomes capricious and there may be vomiting. I have seen nutrition good till a fairly advanced period; but as a rule while the abdomen enlarges the rest of the body emaciates, the subcutaneous fat disappears and the skin of the tense abdomen becomes thin and shiny, so that the blue veins become very evident. Anæmia is usually marked, though this may be associated with a pink flush on the cheeks; the salivary secretion diminishes, the mouth becomes sticky, the tongue red, glazed, and denuded of epithelium, and at this stage there is considerable thirst and no appetite; the constipation and improperly digested food give rise to griping and often moderately severe colicky pains, which are relieved by diarrhoea, and this may again alternate with constipation. As the disease advances the abdomen enlarges and this is specially marked in the upper half; the umbilicus protrudes, the recti and other abdominal muscles become very tense, and the breathing is purely thoracic. The general weakness, pain and tenderness increase and the patient is confined to bed. The temperature is never very high, rarely rising much above 101° F. in the evening, and may often be subnormal, but the morning fall, even in cases of low temperature, is usually more characteristic than the evening rise. I now exhibit a few temperature charts which will emphasise these points. At this stage a certain amount of free or loculated fluid may be detected. The large and tense abdomen exhibits various degrees of resistance at different places. Coils of bowel being usually glued together, prominent tense swellings of knuckles of bowel containing gas and fæces can be readily felt. Commonly the omentum is very much thickened, and owing to the peristaltic movements of the distended bowel it gets curled up on itself, and forms a large, thick, sausage-like mass stretching across about the level of the umbilicus. The amount of effused fluid is usually small, and its location depends on the extent of the peritoneal adhesions. In some cases it is fairly free, the flanks are dull, and succussion wave easily felt. In other cases there are numerous loculi forming evident cysts which, in cases of females have not unfrequently been mistaken for ovarian cysts. I have seen a large collection of purulent fluid walled off in the lower half of the abdomen, and as the bowels are floated upon the surface of the fluid the collection most frequently takes place below the level of the umbilicus. Œdema of the lower extremities and dependent parts of the abdomen occasionally takes place, especially in adults, but this is due to the feeble and atrophic heart rather than to any excessive abdominal tension; the pulse is frequent, small and feeble. The margin of the liver can be felt about an inch or more below the costal margin. The spleen is usually rather enlarged, but not felt below the costal margin.

As the disease advances the emaciation becomes intense, the eyes are sunken, temples and cheeks hollow, countenance shows evident signs of distress, ribs stand prominently out and lower ribs partly everted by the large and prominent abdomen, and the breathing is thoracic. The skin over the chest may be dry, harsh and shrunken, while that over the abdomen is thin, smooth and shiny, and superficial veins very apparent; the umbilicus is unfolded and the recti muscles separated. The patient lies on his back or side with his knees drawn up, weakness is great, and every movement causes pain. There is often stomatitis, with a glazed red tongue and small ulcers on it and on the inside of the buccal cavity. The bowels are often loose, the motions being of a dark, watery, offensive character, and where there is much intestinal ulceration there may be blood and mucus. There is often severe griping and colicky pains accompanying the diarrhœa, but, on the other hand, cases of fatal obstruction have been observed. The temperature in late stages frequently reaches 103° or 104° F. in the evening.

Improvement in these advanced cases rarely takes place, but I have seen recovery after the evacuation of an abscess which pointed at the umbilicus, and in another case after a fæcal fistula had formed in the same situation. One of the most ominous symptoms is the occurrence of purpuric spots on the extremities and flanks.

The diagnosis largely depends on a *resume* of the symptoms which I have detailed. The slow and insidious onset, great wasting, abdominal distension, pain and tenderness, variable tension in different parts of the abdominal walls, thin stretched skin with prominent veins over the abdomen and lower ribs, and in advanced cases protruded umbilicus and separation of recto-irregular lumps in the abdomen, especially a hard, firm sausage-like mass at the level of the umbilicus forming a thickened omentum. There may be general fluctuation or evidence of cyst-like collections of fluid. The breathing is thoracic. The temperature is variable and generally marked by a morning fall. The patient looks ill, is dull and listless but always intelligent, and his senses are normal. The presence of tuberculous disease in other organs assists the diagnosis. The large tympanitic abdomen which occurs in rickets, tabes mesenterica, and dyspeptic troubles is easily distinguished by the uniform and variable distension, absence of muscular rigidity, and no great variations in the resistance at different parts, no evidence of fluid, and thoracic breathing not a prominent feature.

In typhoid fever the abdomen is often distended, but the tension is not great, and there is no muscular rigidity. The spleen is large and easily felt; the patient is dull and apathetic; his intelligence and all his senses are blunted. There is continuous fever and other typhoid symptoms which need not be enumerated. In cases of ascites arising from cirrhosis and Banti's disease the accumulation is great, the fluid is clear and of low specific gravity. In these cases there is often localised peritonitis with well marked friction fremitus, and in some cases the differentiation may cause some difficulty. The same may be said of simple chronic adhesive peritonitis arising from other causes. In some such cases I have found the injection of the peritoneal fluid into guinea-pigs of some value. As a rule patience and careful observation soon settle the diagnosis.

THE MEDICAL TREATMENT OF TUBERCULOUS PERITONITIS. (a)

By LEONARD GUTHRIE, M.A.Oxon., M.D., F.R.C.P.

In discussing the medical treatment of tuberculous peritonitis I am hampered by the prevalent notion that surgeons alone are able to cure this disease. Mr. Watson Cheyne, for instance (Harveian Lectures, 1899, p. 59), asserts that: "The prognosis of tuberculous peritonitis, when no surgical intervention has taken place, is undoubtedly very grave, but much depends on the form of the disease and on the presence or absence of complications." With the latter part of the sentence I agree, but to the former I venture to demur. It implies that the prognosis when surgical intervention has taken place is no longer very grave, and that those who do not call in the aid of a surgeon are guilty of allowing a very grave prospect to continue when it might easily be converted into one more favourable. If Mr. Cheyne's statement be accepted literally, any discussion on methods of treatment other than surgical would be a waste of time. But my own experience of tuberculous peritonitis leads me to think that the prognosis in uncomplicated cases in children is by no means so grave as we are taught to believe, and that the triumphs of surgery in curing this disease have been somewhat over-rated.

(a) Society for the Study of Disease in Children, December 12th 1902.

Of forty-one cases treated at the Paddington Green Children's Hospital, fourteen underwent laparotomy and seven of these died, whilst of the remaining twenty-seven treated medically only four were fatal. The death-rate in surgical cases was therefore 50 per cent., whilst in medical cases it was under 16 per cent. Moreover, in the four fatalities under medical treatment, the cause of death in three was septic peritonitis, due to perforation or rupture of a mesenteric glandular abscess; in one, death was due to extensive pulmonary phthisis, also present in two of the others. All of them died within a month of entering hospital, and had they undergone laparotomy they would only have increased the percentage of surgical failures. I am prepared to be told that the surgical cases were more severe than the medical which recovered, and admit the fact so far as the fatal surgical cases are concerned, but not as regards those which survived laparotomy.

It has also been urged that cases which recover under medical treatment are not suffering from tuberculous peritonitis at all. Yet it must be remembered that the diagnosis is in practically all cases made by the physician, and it seems a little hard that he should only be right when he calls in a surgeon and always wrong when he does not.

Before discussing further the claims of surgical over medical treatment I must follow the programme and deal with the latter.

Medicinal Treatment.

We cannot claim at present to slay the tubercle bacillus within the body by any drugs or anti-toxins. But the resolvent action of such drugs as mercury and iodide of potassium on tuberculous inflammations is open to discussion. Most of the medical cases were treated by mercurial inunction, or by biniodide of mercury given internally, and recovered—whether in consequence of the treatment or not is a matter of opinion. Some got well without mercurial treatment.

Arsenic.—Is arsenic of use in tuberculous affections? It is believed to cure some cases of lymphadenoma, and it is now well known that so-called lymphadenoma in children is frequently tuberculous. It would therefore be interesting to discover whether these are the cases in which arsenic is of value—for if so, arsenic might affect the course of tuberculous peritonitis. It is used extensively, I believe, in America with this object.

I know no other drugs which can conceivably have influence over tuberculosis; but by some guaiacol carbonate and iodoform are held in repute. Cod-liver oil, of course, is used systematically, but probably as food rather than medicine. Syrup of iodide of iron has a reputation, but I doubt if it is superior to other preparations of iron when anæmia is present. Medicinal treatment of tuberculous peritonitis is almost entirely symptomatic. The chief symptoms which call for treatment are pain and abdominal tenderness, flatulency and indigestion, diarrhœa or constipation, vomiting and ascites.

Pain is seldom marked in patients kept at rest in bed, unless it is due to the onset of acute septic peritonitis. The ordinary slight pains and tenderness can usually be relieved by local applications of belladonna, heated cotton wool or spongio-pilin, or in some cases by painting with iodine. Opium is seldom required.

Flatulency and indigestion need careful dieting and bismuth. *Diarrhœa*, unless profuse and continuous, needs no active treatment. In some cases it may even be salutary in reducing ascites. Bismuth and opium, or aromatic chalk and opium powder, are most useful remedies. Coto and various other astringents seem of doubtful utility. With the exception of biniodide of mercury I have little faith in so-called intestinal disinfectants. They seem to be more useful when added to the evacuations than when taken internally. Diarrhœa, when dependent on intestinal ulceration, is most difficult to control. If the ulcers are situated low down in the bowel, irrigation and astringent or soothing enemata may be of service, but when situated high up, such treatment is of little use.

Constipation.—A loaded rectum should be cleared out by enemata rather than by purgatives, but an occasional dose of castor oil, cascara, or pulv. glycyrrhizal co. may be given unless evidence of ulceration in the shape of blood-stained or black, offensive and purulent stools is present. But it must be remembered that ulceration may exist without any such evidence.

Medical Treatment of Ascites.

It is a question for discussion whether, in cases of ascites, with constipation and scantiness of urine, but without evidence of ulceration, purgatives and diuretics are indicated. I once treated such a case in this manner for a considerable time and the patient recovered. But this treatment is hardly to be recommended as a routine process.

Vomiting is seldom excessive in children at rest and properly fed, unless signs of intestinal obstruction are present which call for immediate surgical interference. When due to gastric disturbance only, bismuth and hydrocyanic acid are the best remedies.

Diet.—It is seldom necessary to feed a patient on fluids unless there is obviously extensive ulceration. The pyrexia present is rarely high enough to interfere with digestion, and harm may be done by restricting patients to the diet usual in enteric fever. One must, of course, keep indigestible substances out of the dietary. In one case, fever, vomiting and dangerous colic following a diet including green apples first drew attention to the existence of tuberculous peritonitis. Starchy and other foods, which, in excess, tend to induce flatulency and fermentation, must be given sparingly. Meat, fish, poultry, can usually be assimilated if carefully minced and prepared. Eggs, cream, milk and butter may be freely supplied. In some cases of intractable diarrhœa a diet of raw or partially cooked meat seems efficacious. When stimulants are required, brandy, if it can be procured, or old dry port from the wood, is best.

Hygiene.— In every case, rest in bed, at all events in early stages, is essential and it should be in open country air. Sometimes children have been sent into the country merely in the hope of recruiting them sufficiently to undergo laparotomy, but in a few weeks they have returned practically restored to health. Also in most of the cases which recovered after laparotomy, improvement was not manifest until the effect of country air was tried. Hence I believe that open-air treatment is even more eminently suitable to cases of tuberculous peritonitis than to those of pulmonary phthisis, and I would send all cases to undergo it under careful nursing and supervision as soon as the diagnosis has been made or even suspected. Rest in recumbent position should be maintained until all active symptoms have disappeared. Medical treatment then simply consists in keeping the patient at rest, in supplying a nutritious, fattening and abundant diet, in the relief of incidental symptoms as they may arise, and, above all, in securing the advantage of open country air.

Radical Treatment of Ascites.

The next question which arises is: When should fluid be left in and when should it be let out? In all varieties of cases it may subside spontaneously after rest in bed and mercurial inunction, but it also comes and goes whether mercury is used or not. In acute cases, unless fluid produces great distension and distress, it is inadvisable to interfere, for if removed it will speedily reaccumulate. Surgeons have discovered that laparotomy is seldom of use in such cases, but, as in some cases of pleural effusion, the withdrawal of a few ounces of fluid is sometimes sufficient to cause absorption of the rest. The supposed danger of setting up general tuberculosis by absorption of the fluid into the circulation is, I think, unfounded.

General tuberculosis is far more likely to be due to carriage of bacilli by the circulation from tuberculous caseating glands to distant parts. In more chronic cases, when fluid shows no tendency to subside it should be withdrawn. Tapping or aspiration in such cases, unless one is certain that the fluid is free, is dangerous. It is better to make a small incision and insert a blunt perforated trochar than to plunge a sharp instrument through the abdominal wall at the risk of wounding adherent intestines.

It has been said (Mr. Watson Cheyne, p. 77, op. cit.) that: "Simple puncture alone is quite ineffectual." But four cases in which the fluid was free and excessive recovered after being so treated, and in only one of these was it found necessary to repeat the process, and then only after a lapse of one year. It is, however, sometimes ineffectual, and the case should then be treated by simple incision or laparotomy. This is the operation which is supposed to have revolutionised the prognosis in tuberculous peritonitis.

It is of the simplest character. The surgeon makes a two-inch incision through the abdominal wall, lets out any fluid which may be present, calls upon the bystanders to observe the resemblance between a tuberculous peritoneum and a sago pudding, and then closes the wound. It is no longer considered necessary to irrigate the peritoneum with or without antiseptics, nor even to break down adhesions unless they are causing obstruction. The surgeon, like an ancient Etruscan Haruspex, merely gazes at the victim's entrails, and then discovers propitious omens for the future of abdominal operations.

Many fanciful theories have been invented to explain the recovery of 50 per cent. of cases after laparotomy. The entrance of light, air, oxygen and non-pathogenic organisms has been held by different theorists to effect a cure. Mr. Watson Cheyne believes that the tuberculous fluid evacuated is replaced by anti-bacteric serum inimical to the tubercle bacilli. If this is so, a similar result should follow simple puncture, and perhaps it does, although the procedure has been regarded as quite ineffectual.

I believe, indeed, that there is no mystery whatever in the matter, but that simple laparotomy is useful only in so far as it lets out the fluid. Dry cases, which are supposed to be cured by the operation, would, I believe, recover equally well if left alone, provided that no complications, such as extensive ulceration, septic peritonitis (due to suppuration of glands or perforation), meningitis, or advanced pulmonary phthisis occur. Indeed, the recovery of uncomplicated dry cases not operated upon compares favourably with that of laparotomy cases, whose convalescence is retarded by abscesses and fistulæ arising from tuberculous infection of the operation scar. On the other hand, surgical interference is absolutely necessary in cases of obstruction by adhesion bands and stricture, and in cases where suppuration is suspected; and when acute septic peritonitis from perforation or rupture of an abscess occurs, an operation is the only chance, though a forlorn one, of saving life. Finally, I believe that caseous mesenteric glands should be removed if possible as being the chief source of fatal dissemination. It will be observed that in all these cases something more is necessary than merely opening the abdomen and looking inside. Unfortunately, the cases in which more is necessary are those which make the mortality of the operation as high as it is; whilst the more favourable results of foreign observers are, I believe, due to operating upon cases which would get well without.

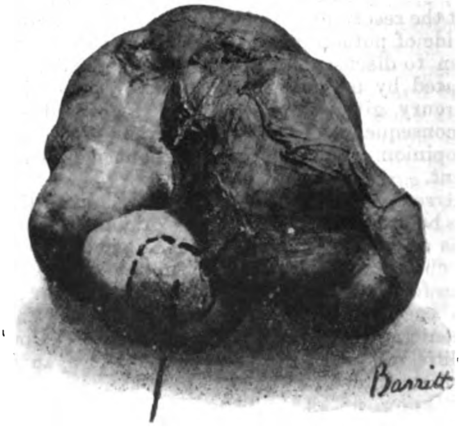
In conclusion, we owe a debt of gratitude to surgeons who, through fortunate errors in diagnosis, have taught us that conditions once held to be incompatible with recovery are by no means necessarily fatal. Those who advocate indiscrimate operations may be reminded of the well-known story of Ambrose Paré, the celebrated French surgeon. Once after a battle he ran short of boiling oil, and could not sleep for thinking of the sad plight of the wounded who had not received their share. But the next day he found them infinitely the better for being without it.

Clinical Records.

ILLUSTRATIVE CASES OF GYNÆCOLOGICAL SURGERY.

By Robert O'Callaghan, F.R.C.S.I.,
Surgeon to the French Hospital, London.

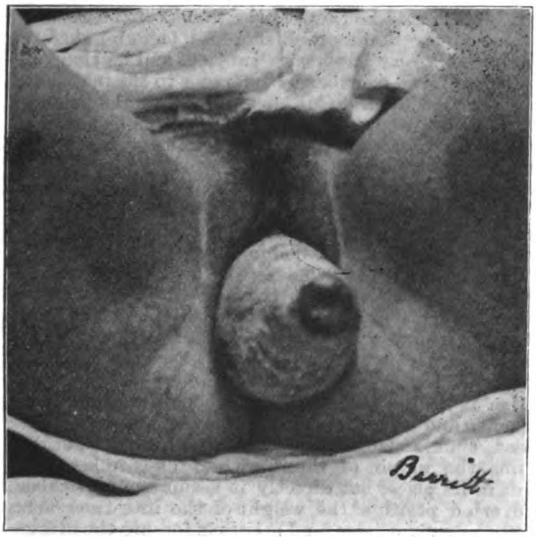
Case 1.—*Fibroid attached to the Liver removed by Hysterectomy.*—The large crop of fibroids shown in the photograph were removed from a single woman, æt. 39. When admitted into hospital it was at first thought she was suffering from acute hepatitis, which, however, on palpation proved to be an attack of localised peritonitis connected with one of these fibroids, which was securely attached to the liver by old adhesions, there being a short, thick pedicle between this fibroid and the main crop; it appeared at first to be a separate growth and hepatic in origin; bimanual examination, however, proved the tumours to be all of the same nature, and uterine in origin; they filled up the pelvis and abdomen so completely that one wondered how the poor woman had been able to earn her living as a general maid, and how the different organs involved in the pressure were able to do the work, and yet until this very acute attack



Fibroid Adherent to Liver.
Point of Adhesion, Posterior Surface.

she had not been ill enough to give up her work for ten years, dyspepsia and constipation being her only troubles, besides profuse losses at her periods. After consultation with Dr. George Ogilvie, whose patient she was, we decided that operative interference was the only means to enable her to earn her livelihood again. On opening the abdomen by a large incision, extending an inch and a half above the umbilicus, I found that this one fibroid was firmly attached to the liver, and on palpation was apparently part of it; it was also adherent to the hepatic flexure of the colon and great omentum. The rest of the tumours filled up the whole abdomen and were adherent everywhere. It required considerable force to peel away the hepatic attachment, which was followed by smart hæmorrhage; this was treated by packing with large, hot sponges while delivering the remainder of the fibroids, one of which was firmly wedged like a child's head in Douglas's pouch, and adherent. After delivery I removed the whole crop by hysterectomy, also the ovaries and appendages. After the peritoneal toilet was finished I then removed the sponge packing, but as there was still some considerable oozing I left a glass drain in Douglas's pouch for twenty-four hours. The patient had a smart attack of localised peritonitis in the hepatic region forty-eight hours after the operation, which, however, yielded kindly to three grains of calomel followed by a seidlitz powder and a turpentine enema. She went to a convalescent home in five weeks, and is now, nine months after operation, fat and well, following her usual occupation.

Case 2.—*Hysteropexy for Complete Procidentia in Single girl, aged Eighteen.*—M. A., single, æt. 18, was admitted into hospital with the condition you see in the photograph—this of two years' standing. Two years previously when working in the fields she lifted a heavy pannier, and while doing so she felt something suddenly protrude between her thighs; the poor girl was so frightened and ashamed that she kept her condition secret, never even telling her mother; left her home and came to London, where she worked for her living with this fulsome condition of things existing, until at last the pain and scalding caused by the urine and discharge voided over her excoriated thighs and ulcerated mucous membrane drove her to confide in her mistress, who brought her to the French Hospital. It is hardly possible to conceive that such a condition of things could exist undetected in this country for two years. After a few days rest in bed, the parts, having been treated by boric fomentations, were easily reduced, and after a fortnight's local treatment I opened the abdomen just above the pubes and anchored the uterus to the peritoneum by two deep silk ligatures passed through the upper and posterior uterine wall, which caused an anteflexion of this organ, thus tilting the cervix backwards and upwards, giving a maximum tension to the vaginal walls. The operation is a perfect success, and the patient is now able to go about and work with her uterus and vagina in their proper site—nine months after operation.



Complete Procidentia

Remarks by Mr. O'Callaghan.—The special point of interest in Case 1 is that it shows that a fibro-myoma can become attached during its life to the liver. Up till lately pathologists thought that it was not possible for these tumours to become attached even to the small intestine. Now we know better, and find them like parasites, forming strong adhesions to any, or all of the viscera, and as I have on a previous occasion pointed out can live entirely upon these adhesions after complete strangulation of their pedicle by torsion. As far as I can learn from literature on the subject, this is the first case of fibroid attached to the liver that has been recorded. It is also worthy of note that large tumours such as these can be carried about by a woman for many years without her even suspecting anything abnormal in her interior economy, as in this case. A severe attack of gastro-enteric influenza was the principal cause of the acute symptoms, and was what she came in for.

In Case 2 we have also a unique record, that is, as regards the age of the patient, as I cannot find any evidence of such a condition reported as occurring in a girl of this age. The misery, both mental and bodily, that this poor girl must have silently endured for two years can only in some way be realised by a glance at this photograph. I had hoped, when opening the abdomen, to find some cause for this unusual condition of things in a young girl, but found nothing abnormal. I stitched the uterus to peritoneum only, as I consider this makes an easy and mobile attachment for the uterus to swing from, and in case of pregnancy in the future gives more room for it to rise out of the pelvis.

In those cases in which I found this operation necessary after the menopause, I fix the uterus firmly to the muscle and tendon in the abdominal wound, and if the anterior wall is much prolapsed, I fix the uterus up, completely retroflexed, by inserting the sutures as low as possible in the anterior uterine wall. In conclusion, let me say that, in my opinion the time has now come, when pessaries, of whatever kind or description, should be for ever discarded in the treatment of these cases, and they should be dealt with by some form of abdominal fixation.

Transactions of Societies.

BRITISH GYNÆCOLOGICAL SOCIETY.

Meeting held Thursday, December 11th, 1902.

Dr. Heywood Smith, a Vice-President, in the Chair.

Dr Macnaughton-Jones showed a series of specimens of myomata exhibiting the different morphological features of these growths. The question arose from Dr. Snow's specimen of monoma shown at the last meeting as to the dual nature of that tumour. In the specimens he (Dr. Macnaughton-Jones) now brought for inspection all the usual forms of growth were seen. In one the single fibro-myomatous growth involved the entire uterus, the canal of the latter being obliterated and the section of the growth showing a dense fasciculated and reticulated structure; in this instance the whole tumour preserved an exceptionally red appearance. In another, the growth, of a similar nature, is seen to compress the uterus laterally, obliterating the canal in this manner. Still, the tumour is a single one; there is, as in the last, but little capsule, and there is only the serous envelope covering the interstitial growth. In another specimen is seen a different condition. The uterus lies in the centre, and there is a growth, encapsuled and symmetrical in character, at either side of the uterus compressing the canal between the two, and these bilateral growths are encapsuled. Any of these growths before section would give the idea of a single myomatous growth. Here, however, was an interesting specimen of a comparatively small myoma of an oblong nature, which had only recently been examined, so hard that it had to be cut through by the aid of a hammer. In it the canal of the uterus (removed by supra-vaginal hysterectomy) was lost in the growth, which exhibited two isolated nodulated growths of the same size, which had evidently grown in centrifugal fashion with consecutive laminæ, encapsuled and separated by some distance from the serous covering. In the drawing of another such tumour, also apparently of a single myoma, five of these interstitial growths were seen embedded in the substance of the tumour. In one of these specimens a few small subserous growths were beginning to sprout. On the other hand a typical example of the subserous and submucous multiple myoma was seen in the large tumour exhibited. In this, if the separate growths were all counted, from those of the size of a large orange to those of a pea, there could not be less than a hundred. In this case the uterine canal was hollowed out into a large cavity; mucoid degeneration had still further increased its size and the separate outgrowths had taken the direction of least resistance, either submucous or subserous. A few were pedunculated. In the most interesting specimen he had before shown at the Society they would see that the uterine canal was greatly enlarged and disintegrated by mucoid degeneration, while above it the large subserous myoma was of the ordinary type, but the distinct growth below, which grew from the cervical region, had degenerated into a necrotic mass in the centre, surrounded by a calcareous zone inside the capsule of the tumour. The question of interest was, how these interstitial, nodular and isolated growths began; what relation did they hold to the original morbid process? were we to regard them as separate tumours, and speak of them as such, or were they secondary formations arising from some pathological accident or occurrence in the original growth, as, for example, an infarction, or a vascular degeneration, as contended for by Mr. Stanmore Bishop? A centrifugal growth arising around an old extravasation and a resulting hyperplasia might explain their appearance, but this was a question rather for the histologist and pathologist.

Mr. **Robert O'Callaghan** contributed notes of a case of "Hysteropexy for Complete Procidentia," which will be found under "Clinical Records" on page 683.

Dr. C. H. F. **Routh**, commenting on the possible etiology of such a displacement, referred to two cases in young unmarried women in which prolapse recurred after repeated operations, and in which, from the observation of the nurses, there was reason to suppose that vicious interference with the genitalia, on the part of the patients themselves, might have been a factor.

Dr. **Macnaughton-Jones** thought the operation described quite inadequate for the cure of the condition shown in the photograph; if the uterus had been fixed to the fascia of the abdominal wall there might have been a chance. It would be interesting to hear the further progress of the case, as the patient did not appear to be wearing any support. As a rule, in his experience, such cases were not cured without some cicatrisation to the abdominal fascia.

Dr. **Herbert Snow** had had such excellent results after anchoring a prolapsed uterus in a young married woman to the cicatricial tissue left by a previous cœliotomy as to suggest the idea of artificially creating such tissue as a seat for the fixation of the uterus.

The **Chairman** (Dr. Heywood Smith) concurred with Dr. Macnaughton-Jones that mere suspension to the peritoneum was absolutely insufficient. He believed he had himself been the first to fix a uterus to the abdominal wall, and had been very severely criticised at the time for doing so, but ventral fixation came to be very frequently done in operations for ovarian disease a good many years ago. Howard Kelly and some others strongly recommended that the sutures should be passed through the anterior, and not, as Mr. O'Callaghan had done, through the upper and posterior wall of the uterus. The best position for the suture was an important question in reference to the development of the womb in any subsequent pregnancy.

The **President** showed a cirrhotic ovary removed from the left side of a nurse, æt. 24; the other ovary, though also affected to a lesser extent, on account of the patient's youth, had not been removed. Menstruation had been established at the age of 14, and had been regular till a year before he saw her, when it began to come every three weeks and to last for six days; but for the last two years she had had very severe pain in the left inguinal region before and during the flow. There was some tenderness on the left side, but no evidence of enlargement of the uterus; she had been curetted without any good result. He had diagnosed the case as one of cirrhosis, as on operation it proved to be, but the specimen was peculiar: in ordinary cases of cirrhosis the fibrous tissue was deposited round the blood-vessels, and the stroma contained cysts so that the outer surface became corrugated; this ovary was quite smooth, its envelope, though not very thick, was extremely dense and firm, so that the increased local circulation at the periods set up a very tense condition attended with great pain. After the operation the patient suffered from chloroform sickness for nearly a week, and, probably from strain, a swelling formed in the left side, which he took to be a hæmatoma, and which subsided under the administration of perchloride of mercury. He was sorry to say that when she left London she had still some pain in the left side, and the question suggested itself whether it might not have been better to have removed both ovaries, and whether the pain was merely in the stump and would subside as the post-operative hyperæmia decreased, or was sympathetic and due to the cirrhotic ovary left on the right side.

Mr. **Stanmore Bishop** then read a paper on "Prolapsus Uteri," which will be found under the heading of "Original Communications."

Mr. **Jessett** said he thought the thanks of the Society were due to Mr Stanmore Bishop for bringing before its notice this very important subject, and he thanked Mr. Bishop for so courteously referring to the fact that, in a paper read by him (Mr. Jessett) before the Society last year, attention was drawn to the importance of restoring the utero-sacral ligaments when operating for prolapse or procidentia of the uterus. In discussing this subject, it is important to consider the reason of the uterus dropping. I think it will generally be agreed, as Mr. Bishop has pointed out, that the fundo-pubic ligament and the attachment of the uterus to the bladder have very little to do with keeping the uterus in its normal position, and that on the contrary the bladder may often be one of the primary causes of prolapse of the uterus, acting mechanically, for if the bladder is frequently allowed to become over-distended, by keeping the uterus in more or less a vertical position it throws an extra strain upon the utero-sacral ligament, and this strain becomes the greater if the patient suffers from constipation. In the normal position the weight of the intestines tends to keep the uterus in its place, but directly it assumes a vertical or retroverted position, the weight of the intestines acts directly as a *vis a tergo*, and assists in forcing the uterus downwards into the vagina. Those were the arguments that induced me in the first place, when performing ventral fixation of the uterus, to urge the necessity of restoring this important ligament. Most gynæcologists who have practised ventrofixation for prolapse have, I take it, experienced the disappointment that often attends their efforts. Sooner or later, in many cases, the attachment to the abdominal wall will become elongated and stretched, and the uterus will gradually prolapse again. Now this trouble can only be overcome by restoring the hinge or sacro-uterine ligament, thus slinging up the uterus posteriorly and allowing it to assume its normal position. Mr. Bishop rightly interprets my views. However, as I have not at present trusted entirely to the shortening of these ligaments alone for the retaining of the uterus in its proper position, and, so far as I can gather from his paper, neither does he, as he shortens the round ligaments, and also repairs the perineum, so that so far we both agree. Mr. Bishop's operation, however, differs from my practice in so much that when I have placed the patient in the extreme Trendelenburg position and drawn the uterus well forward, an assistant passes a long pair of forceps into the vagina, pushes the posterior fornix firmly up, and by opening the blades puts it upon the stretch; avoiding the vaginal mucous membrane, I then, by means of a darning stitch, pass two or three sutures in and out through the tissues as often as the length of the elongated and stretched fornix requires, commencing at each side of the rectum, and finally catching up the muscular tissue of the uterus nearly opposite to the internal os, tie each suture firmly, but not too tightly. If the round ligaments are very much stretched I prefer to double these upon themselves and secure them with two or three fine silk or chromic gut sutures. I have never trusted entirely to the shortening of the sacro-uterine ligament, as although the hinge is restored, yet I should fear that should the perineal support be weakened and left unrepaired future trouble would result. This is evidently Mr. Bishop's view also, as in the two cases he reports perineorrhaphy was also resorted to. In many slight cases, however, I can quite realise that the restoring of the sacro-uterine ligament would be quite sufficient to keep the uterus in its position. When the cervix is greatly hypertrophied it may be necessary to amputate the hypertrophied portion, as well as to perform perineorrhaphy, but to discuss this would be outside the scope of Mr. Bishop's paper. One method of shortening this ligament was alluded to by Mr. Bishop in regard to those cases which can be attacked through the vagina. I have in two severe cases of procidentia operated in this way by reflecting a diamond-shaped strip of mucous membrane from the posterior vaginal wall with the apex of one end at the junction of the mucous membrane with the uterus. I then unite the deep muscular edges by passing a Chinese gut suture deeply, with a curved needle uniting the two extreme points of the divided parts at the cervix uteri and sacral point, catching up the tissues in one or two places according to the length of the denuded surface to be shortened, and ending in the aponeurotic tissues at the side of the rectum. Two other sutures are passed similarly, first on one side, then on the other, and tied, thus uniting the extreme points. The mucous membrane is then united by a continuous ten-day gut suture transversely, so burying the deep sutures. By this operation it will be seen that the os and cervix are drawn completely up to their normal position. The incision in the vagina, which was made longitudinally, becomes transverse. Since performing this operation I have read Bovée's interesting paper (*American Journal of Obstetrics*, July, 1902). He says the ligament can be brought plainly into view by careful dissection; I hardly think this is necessary. He also shortens the round ligaments through the anterior fornix. In neither of my cases did I do this. I finally perform perineorraphy if necessary. One case was that of a very stout lady, who was quite incapacitated from taking any exertion in the way of walking, gardening, &c. Now she can bike and ride, and enjoy her life better than she has done for years. In very severe cases I certainly should feel it safer to adopt ventro-fixation as well as shortening the sacro-uterine ligaments. In such cases I think every object would be met by ventro-fixation by means of a suture of ten-day catgut, passed through the peritoneum and transversalis fascia only, so that practically there would be merely a peritoneal ligamentous attachment connecting the anterior surface of the uterus to the parietis. This would get over the objection which Mr. Bishop very properly raises of the fixation of the organ by the combined operation of ventro-fixation and shortening the sacro-uterine ligaments. I would strongly urge upon Fellows who are constantly having these distressing cases brought to their notice to give the suggestion so admirably described by Mr. Bishop in his paper, and described and practised by myself, their careful consideration, and also to read his paper alongside of that published by Bovée. I am convinced that the principle is good, but doubtless the details of the operation require much perfecting, and I shall hope in the future to find that some of the distinguished Fellows of this Society will in the near future be able to report the relief of many poor women whom they hitherto had looked upon as hopeless invalids.

Dr. Macnaughton-Jones said that it was only right to remember that Schultze had over twenty years ago entered fully into the part played by the retro-uterine and utero-vesical folds in the production of retroflexion and prolapse. In fact, his entire treatment of these conditions was based upon the part taken by these structures in maintaining the uterus in its normal position. Very little had been added to our knowledge of the etiology of prolapse since Schultze wrote on it. Before adopting a new procedure we should contrast it with other operative measures which might be suitable in cases in which it was not indicated. For his part he believed that the important point to press in regard to prolapse was its prevention rather than its cure. The recognition of the early stages of prolapse, and the causes which were contributing to its occurrence, enabled us by proper palliative measures and simple operative steps to anticipate and prevent it. Thus more serious and extensive operations were rendered unnecessary. It was certain that by other operative procedures than that advocated by Mr. Stanmore Bishop most satisfactory and permanent cures were effected. Everything depended upon the stage and degree of the prolapse. Referring to some of these procedures, he said that different operators were wedded to the methods which they practised themselves, but which others had abandoned, for example, to vaginal colpotomy with fixation, which Mr. Bishop would altogether discard. Such an expert as Auguste Martin, of Greifswald, who must have treated many hundreds of these cases, always operated by vaginal fixation, and at the same sitting, if necessary, also performed anterior and lateral colporrhaphies, perineorraphy, and amputation of the cervix, operation in every case being preceded by curettage.

After a few remarks by Dr. Routh, on the suggestion of the Chairman the discussion was adjourned to a future meeting, Mr. Bishop reserving his reply.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Surgery.

Meeting held Friday, December 12th, 1902.

The President, Mr. L. H. Ormsby, in the Chair.

Mr. E. H. Taylor on a case of

CISTIC TUMOUR OF THE BRAIN.

The patient, a man, æt. 32, had enjoyed good health up to March, 1901. Subsequent to this date he began to experience progressive weakness in his left lower extremity, which extended upwards so as to involve his arm and his face, also on the left side to some extent. Sensation was somewhat dulled on the paralysed side. There had never been any convulsive attack or giddiness. The classical symptoms of intracranial pressure were very marked, viz., optic neuritis with progressively failing sight, frequent and paroxysmal headache and vomiting. The diagnosis made was that of a subcortical tumour in the right cerebal hemisphere and in the vicinity of the motor area. Operation was performed on April 26th, 1902. A large omega-shaped flap, 3 ins. by 3 ins., was raised, including the scalp and the subjacent bone: two-thirds of the flap lay in front, one-third behind, the line indicating the fissure of Rolando or the sulcus centralis. In the process of elevating the bone a number of small trephine holes were made and the intervening bridges of bone divided with Gigli's saws. The dura when exposed was very tense and did not pulsate. On dividing the membrane and turning it aside, the brain bulged into the opening in an alarming fashion. No tumour was visible nor could be felt; fluctuation, however, was very evident quite close to the brain surface. An incision made through the cortex permitted the escape of a quantity of clear straw-coloured fluid, the result being that the brain instantly collapsed and receded very considerably from the inner aspect of the cranium. A sterilised soft rubber tube, introduced into the cavity for drainage purposes, could be pushed easily in different directions revealing a cavity of some magnitude. The bone flap and dura mater were replaced, and the tube brought out through one of the trephine holes at the posterior margin of the flap. Meningeal hæmorrhage caused some trouble and delayed the concluding steps of the operation. Patient bore operation well. There was temporary paralysis in the left arm for some time afterwards; however, the after-course of events has been satisfactory; the left lower extremity has recovered its power, so also has the upper extremity. The patient is able to perform his regular work as well as usual, and has never had any symptoms of headache or vomiting since the operation. His sight has also improved. An interesting feature of the case is that more than three months ago a slight convulsive seizure occurred in the left arm suggestive of the onset of Jacksonian epilepsy; for this the patient was put on fairly large doses of bromide of potassium. His general health is excellent at present, and according to his own statement he has never been better; his vision, too, has improved. The last observation as to the patient's condition was made on November 28th, seven months after the operation.

Dr. **Maunsell** said that he thought that the fracturing of the base of the bone flap was not right. It would be better if it were first nearly sawn through with a Gigli saw.

Sir **Thomas Myles** in a case of glioma had found the introduction of the Gigli saw very difficult; it had, however, the merit of causing little or no bleeding. Sir Thomas explained why Mr. Maunsell's method was not applicable. He thought it was impossible to make a differential diagnosis between a cystic tumour and a glioma.

Dr. **Haughton** said that if the centre of motor disturbance was located it might have been better to make a small trephine hole over the tumour, introduce a small needle and ascertain if it were a fluid tumour. This method would not cause much brain disturbance and would give the necessary information.

The **President** detailed a case of abscess of the brain he had recently operated on with good results.

Mr. E. H. **Taylor** said his own experience was that the bone breaks cleanly across. If a spicule did appear it could easily be snipped off with a forceps. The difficulties in brain tumours were three in number. 1. Diagnosis. 2. In what part is tumour situated? 3. Is it capable of being removed? With regard to the trephine holes, he said if he were doing the operation again, he would just make two and make vertical sections on each side with the forceps. With regard to anatomical measurements he said he thought it desirable to define approximately the underlying portions of the cortex. He formed a depressed fracture situated near the motor area. He did not approve of Dr. Haughton's plan of trephining a small hole and putting in a small syringe.

Mr. R. C. B. **Maunsell** read a paper on

TWO UNUSUAL CASES OF NEPHRECTOMY.

The first case was that of a female infant of sixteen months, from whom he removed a congenital cystic kidney which weighed 3 lbs. 2 ozs. and measured 22 by 16 ins. in circumference. The child made an uneventful recovery. Mr. Maunsell advocated ether as the anæsthetic for children, and gave his reasons for choosing an oblique incision commencing at the eighteenth intercostal space and sloping to the middle line below the umbilicus, the sheath of the rectus being opened without cutting the muscle fibres. The second case was one of pyonephrosis, complicated by subphrenic abscess following occlusion of the ureter. Mr. Maunsell treated it by Ollier's subcapsular nephrectomy, and gave reasons for this choice. The pathology of the cystic kidney was then discussed and it seemed to support the theory of an origin in fœtal papillitis.

Mr. **Taylor** thought the subcapsular method of securing the kidney very useful in some cases.

Mr. **Lentaigne** said that he had found the subcapsular method of operation very easy in a case of tuberculous kidney without perinephritis. He related a case in which he had drained both kidneys for calculous pyelitis with complete success.

Mr. **Gordon** said that in these congenital cystic kidneys that the affection was bilateral, and one would fear that the second kidney might become inefficient. He considered the incision from tip of the last rib towards the sheath of the rectus a very good one.

Dr. **Wayland** said that as regarded anæsthetics for children he agreed with Mr. Maunsell that ether is better than chloroform. There were only two drawbacks to ether: 1, it was more unpleasant; 2, there was a liability to accumulation of mucus. Both these were only temporary, and the second one ceased soon after commencement of operation.

Mr. **Maunsell**, in replying, said that the reason he performed nephrectomy in this case was that he knew the history of the case, and that there was no chance of the ureter becoming pervious. Besides, the patient was moribund from cancer. He thought the sub-capsular should be the primary operation in such a case, as the pedicle could be got at in case of hæmorrhage. He said he always gave ether to children, even in removing tonsils and adenoids.

The Section then adjourned.

France.

[FROM OUR OWN CORRESPONDENT.]

Paris, December 21st, 1902.

TREATMENT OF PSORIASIS.

Prof. Chauneil recommends the following treatment: The patient should be advised to reduce his animal food and follow as much as possible a vegetable diet, abstaining from strong cheese, alcohol, and fermented liquids generally. Lithia or alkaline waters were of use, especially when taken at the springs. Regular corporeal exercise had an advantage of keeping the skin in order.

The internal medication usually employed is arsenic, iodide of potassium, and the dried thyroid gland. Of the former, Fowler's or Pearson's solution, or, again, the waters of La Bourboule, were generally given. Four to six drops of Fowler's solution at each repast, increased every two days by one drop until twenty drops were reached, constituted an excellent method of taking the salt. Pearson's solution may be given in double that amount, while the Bourboule waters might be given from one to three glasses daily.

Iodide of potassium should be given in large doses, commencing by one drachm daily to three drachms. It is recommended to drink a glass of water after each dose to prevent gastric intolerance. The treatment should not exceed one month.

He considered ingestion of the thyroid gland dangerous.

The external treatment was much more important. The first thing to be done was to remove the scales by a warm alkaline bath, somewhat prolonged, during which the patient rubs himself vigorously with a brush and soft soap.

The following applications may be employed:—Vaseline, lanoline, axunge, are adapted to persons whose skin is very fine and sensitive. Oil of cade is in very general use; it is prescribed under the form of glycerol.

Weak—

℞ Oil of cade, ʒij.;
Soft soap, q.s.;
Glycerol of starch, ʒiij.
Ess. of cloves, q.s.

Strong—

℞ Oil of cade, ℥iss;
Soft soap, q.s.;
Glycerol of starch, ʒiss;
Ess. of cloves, q.s.

Pyrogallic acid can only be employed on small surfaces on account of possible intoxication, as evidenced by a dark olive-green colour of the urine.

Chrysophanic acid gives rapid results; the strength is one in ten. As in the case of pyrogallic acid, the surface presented to the ointment should be very limited. Mercurial preparations, naphthol, salicylic acid, are used by some with much success.

R Vaseline, ℥iiij;
Pyrogallic acid,
Chrysophanic acid,
Ichthyol,
Naphthol,
Salicylic acid, āā ʒss.

Glandular Fever.

Glandular fever, says Dr. David, is not well known, in spite of the articles published on the affection by Mérigot and others. It follows almost always an infection of the tonsils and the pharynx in children. Its principal symptoms are: More or less intense fever, lasting from three to four days; the glands of the neck on both sides become swollen and painful, and in the course of the affection other glands become infected, such as those at the roots of the arms and legs, of the mediastina, and in the mesentery. The glands, except under very rare conditions, never suppurate. This curious affection may be attended with serious complications—swelling of the liver, spleen, epistaxis, albuminuria, otitis, and general septicæmia. The malady gets well by ordinary hygienic treatment. Quinine seems to have no effect on the fever.

Bovine Tuberculosis.

Dr. Borrel, of the Institut Pasteur, to whom Dr. Garnault appealed to investigate the experiment he was carrying out on himself to prove the transmissibility of bovine tuberculosis to man, has just drawn up his report. As might have been anticipated, Dr. Borrel does not find himself in a position to formulate any definite conclusions, although he gives a guarded support to Dr. Garnault's views. Professor Koch's statements will require much more protracted, extensive, and careful experiments than these to establish either their trustworthiness or the reverse.

Germany.

[FROM OUR OWN CORRESPONDENT.]

BERLIN, December 20th, 1902.

At the Medical Society, Hr. Gutmann showed a patient suffering from

Gumma of the Retina.

A conical projecting black speck was to be seen between the retina and the macula lutea, by the inner side of which a distinct white tumour was visible. In the immediate neighbourhood were blood-specks and white exudations and changes in the other parts of the retina and arteries. The patient denied having had syphilis. Specific treatment had been begun, however, and the tumour was becoming less prominent.

Hr. Rosenstein showed the urinary organs of a man who had been admitted into hospital in an unconscious condition. For years he had suffered from bladder troubles. Two days before he had been attacked with nausea and vomiting, and later on, loss of consciousness. Then complete aneuria came on. Catheterisation failed, and puncture of the bladder was only partially successful, for when the patient was admitted the bladder extended to the umbilicus. A vesical fistula was made, but the patient died in a state of coma in twenty-four hours. The autopsy revealed excessive hydronephrosis, hypertrophy of the prostate, and four false passages.

Cadaveric Fatty Pneumonary Embolism.

Hr. Westenhoeffer reminded the members of his remarks the previous year on frothy liver, and observed that all frothy organs were cadaveric formations. The deficient nucleus colouring depended on chemico-physical, not on biological, processes. In June this year he had again the opportunity of doing a *post-mortem* on a body with frothy organs. It was that of a woman after abortion who had been feverish for six days, and who died the day after her admission into the Charité. The section was made eleven hours after death, and all the organs were found emphysematous. The heart, which, after ligation of all efferent and afferent vessels, was opened under water, and air escaped, and fat at the same time. Fat was found also in the capillaries of the lungs. Whence the fat came an examination of all the organs did not at first reveal. As the larger vessels of the lower extremities were opened, however, fat was found in both femoral veins, which welled up out of the deep femoral on pressure. This pointed to the bone marrow. This in both femora was completely split or broken up and discoloured, and Fraenkel's gas bacillus was easily found.

The speaker believed that this must during death have found its way into the blood-vessels. The gas production must have taken place after death. A further condition was that red marrow must be present, because in white marrow the bacillus would not develop sufficiently as it was but poor in albumen.

Fistula of the Urethra and Cancer.

Hr. Lipman-Wulf related the case of a man in the fifties who fell astride on to the angle of a trunk and hurt his urethra. After two months there was trouble in micturition, and a tumour formed on the perineum. Urethrotomy was performed, and several small abscesses were found, but the fistulous opening could not by any means be closed. In the course of a few months signs of cancer developed. The tumour mass was scraped, a catheter *a demeure* was inserted, the bladder washed out regularly, and in this way the man's existence was rendered tolerable to the end. The tumour itself, however, steadily continued to grow. Examination of the scraping showed flattened epithelium, so the growth was a canceroid.

Prognosis in such cases depended on the time at which the affection was recognised and on the site of the tumour. It could originate in the epidermis of the skin and spread internally or *vice versa*, as Posner had shown cylinder epithelium could be converted into parchment epithelium and harden. In advanced cases the structure of a new growth would not of a certainty prove its origin.

Deafness and Hearing Exercises.

Hr. Treitel said that Urbanstschitsch, of Vienna, who introduced the practice of hearing or listening exercises, believed that the hearing power was improved by them. He himself thought not, but only that the deaf children learned to combine. Listening to the tones of tuning-forks was of no practical use.

Congenital deafness, as distinguished from acquired, was frequently associated with mental weakness. This point was very important. For, with children with sufficient hearing power and sufficient intelligence, something could be attained by hearing exercises. It was more difficult with children who had only vocal hearing. It was questionable whether in the case of the totally deaf such attempts should be made, or whether as many teachers were of opinion the attention should be diverted from lip reading. It would be more correct to institute different classes, in which the totally deaf should be instructed quite apart from the others, as was already the case in some foreign countries.

Austria.

[From our own Correspondent.]

Vienna, December 20th, 1902.

Sporadic and Endemic Cretinism.

Kassowitz continued the discussion on Pineles' paper before the Gesellschaft der Aerzte. He considered Pineles' nomenclature at fault, as "congenital myxœdema" and "infantile myxœdema" were not good definitions. He thought "congenital" and "acquired" would be better, although he had some doubt about the acquired form, as out of twenty-three cases which he had carefully examined he found that the myxœdema was in all congenital. Again, the opinions of different observers varied so much that it was difficult to determine if the disease was transmissible from one to another at all.

Judging from the photographs produced by Pineles the congenital form which he described was not so severe as he would have us believe, as many of the severe symptoms were quite absent, such as the idiotic or other complicated signs. The *formes frustres* of Pineles was nothing more than an abortive form of myxœdema.

Kassowitz thinks that there are other two morbid conditions that should be viewed as derived from the same origin, viz., micromelia and Mongolism. All the three had a sunken glabella, from the early synostosis in the pterygoid, as well as the epicanthus which was common to all. In addition to these common traits there are a few malformations constantly present, viz., umbilical hernia, deformed aural appendages, inguinal hernia, cryptorchidism, non-union of the fontanelles, &c., &c. It is true that Virchow, at an earlier period of our history, gave it as his opinion that micromelia was a form of rhachitis fœtalis, which has since been proved to be an error, as the large joints and flexible bones are absent. It must be admitted that the etiology of all the three diseases is very obscure, and that the thyroid plays a very active part in all the three, although the complex symptoms raise doubts of all being genuine myxœdema; more probably micromelia and Mongolism depend on a morbid condition of some other gland or glands than the thyroid, which would isolate myxœdema, micromelia, and Mongolism.

Before this problem can be solved, a large amount of careful observation must be collected and facts collated in obstetric practice to support the hypothesis.

Rosenberg agreed with Kassowitz that rudimentary cases of cretinism were not due to the agency of the thyroid. He now recorded the history of two cases in his own practice which came into the world perfectly normal, fed on the breast up to the ninth week, when a prepared food was given in the third month. Immediately after this change all the complex symptoms of myxœdema set in. Kassowitz's statistics of twenty-two cases, having only two in the early part of the first year of life that were suspicious myxœdema, appear to be correct. It is not to be assumed that this proves perfection of the thyroid at birth, when the child continues healthy till weaned, and thereafter suddenly develops all the symptoms of myxœdema. The hypothesis is that the mother's milk supplied all the wants of the thyroid, but as soon as this natural diet is withheld the symptoms of struma priva appear at once, thus proving that an agency is conveyed through the mother's milk that supplies the absence of the gland. This is abundantly proved by Bramwell's experiments, who fed two children of undoubted struma priva by two nurses who were treated with thyroid gland.

Paltauf cannot agree with Kassowitz that myxœdema, micromelia, and Mongolism have the same origin. The anatomical pathology of micromelia is a chondro dystrophia, which has really no connection with myxœdema or the thyroid gland. A real dwarf has all the cartilages in perfection. Mongolism, according to Kassowitz's own showing, has no connection with the thyroid, and may therefore be dismissed from the category at once. The common symptom he referred to of the synostosis of the spheno-occipitalis cannot be accepted as proving a common etiology, although it must be admitted as a coincidence in the three morbid conditions. Biedl's experiments with different animals do not relieve our difficulty. He found that dogs and cats deprived of the thyroid became simply dwarfish with no intellectual defect, while goats and lambs, on the other hand, treated in a similar manner were stupid and idiotic.

Kassowitz said he objected to the term "cretinoid" if no cretinoid connection existed, but he was inclined to believe that some relation existed which to his mind was proved in the treatment of micromelia and Mongolism with thyroid gland. The great resemblance of the symptoms was to his mind conclusive proof.

Knopfelmacher said that in his long series of cases at the Children's Hospital, where there was perfect absence of the thyroid, it was in the second half of the first year of life that myxœdema presented itself in all its force, and more particularly in the assimilation of sugar stuffs which appear in the urine to the extent of 160 grs., but after a few days' treatment with the thyroid the amount will fall to 75 grs. or less.

On the other hand, however, he never got satisfactory results when the same treatment was applied for Mongolism, and therefore concluded that Mongolism was not intimately associated with myxœdema.

Offer said that Porge's experiments showed that cane sugar was converted into levulose when a struma priva was treated with the gland.

Weiss said that he had carefully watched 350 new-born children and found two with Mongolism but none with myxœdema, which, when treated with thyroid, had a negative result.

Pineles, in conclusion, defended "infantile myxœdema," which he considered was acquired. The children came into the world quite healthy, and would continue growing in perfect proportion for a year or so, and then suddenly, without any obvious cause, take on a struma priva condition.

The Operating Theatres.

ST. PETER'S HOSPITAL.

Hydatid Cyst of Pelvis Simulating Distended Bladder.—Mr. **Swinford Edwards** operated on a man, æt. 36, who had been admitted with the following history:—He had suffered five months ago from retention of urine which was relieved by catheterisation; a month afterwards he had another attack, and again another a week from the time of the present operation. He had increased frequency of micturition; by day nine or ten times, and at night once or twice; he had never suffered from hæmaturia, nor had he had any stricture. On examination *per rectum* there was a large, hard mass at the situation of the trigone. Mr. Edwards said he had endeavoured to examine the bladder by means of the cystoscope a few days previously, but, although he could pass a full-sized catheter into the bladder, he was not able to introduce the cystoscope. There was a large swelling externally, extending from the pubes up to the umbilicus, and this, when examined bimanually, that is to say, with the finger of one hand in the rectum and the other hand over the abdomen, gave the impression of being a large, tense cyst; and a distinct thrill could be elicited. Mr. Edwards also mentioned that, on passing a catheter, and evacuating all the urine possible, no difference could be detected in the abdominal swelling. A suprapubic incision was made, and on opening the pre-vesical space the bladder wall was clearly seen lying in front of the cyst. As the cyst appeared more prominent to the left of the middle line, the bladder was dissected free and pulled over to the right side. The cyst was now exposed, having peritoneum above it and collapsed bladder to the right. An incision having been made into the cyst, from a pint and a half to two pints of clear watery fluid escaped, and one or two daughter cysts presented. Mr. Edwards now shelled out the lining membrane of the cyst, which came out *en masse*, containing in its outer or fibrous wall two or three secondary cysts. The cavity remaining was thoroughly mopped out with gauze swabs, the opening in it stitched to the margins of the skin wound, and a large rubber drain inserted. Mr. Edwards said that this was a rare form of disease in this locality; he thought that the cyst had sprung from between the rectum and bladder, and was bounded above by the recto-vesical pouch of peritoneum; as it increased it gradually raised the peritoneum and pressed on the bladder, giving rise to increased frequency of micturition, and latterly to two or three distinct attacks of retention. He pointed out that no difficulty in defæcation had been complained of, although the lumen of the rectum was distinctly impinged upon. The case, he said, had been sent to the hospital as a case of distended bladder, due to a stricture or to some prostatic trouble, nor was the true nature of the case discovered until the patient was under the influence of an anæsthetic. He pointed out how readily in this case the bladder itself might have been damaged in incising the cyst; if this had occurred the prognosis would not have been a good one; this accident was avoided by throwing a good light into the wound, thus causing the muscular coat of the bladder to be distinctly seen. The peritoneum, he remarked, although raised by the cyst itself, was carefully kept out of the way. Why this man should have suffered in this way was, he thought, a difficult point to elucidate, as there was no complete history beyond the fact that the patient was fond of watercress, in which he indulged from time to time.

The case, a fortnight after operation, was doing well; all bladder symptoms had disappeared.

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"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 24, 1902.

OYSTERS AND TYPHOID FEVER.

Some years ago it was ascertained that the poison of enteric fever could be conveyed to man by the agency of contaminated oysters. The public was straightway seized with consternation, and the oyster trade received a well-nigh fatal blow, from which it has since recovered only in a slow and partial manner, and this valuable article of food has fallen to a comparatively reasonable price. Hardly, however, has the popular distrust faded away sufficiently to inspire fresh confidence among consumers than there comes news of fresh disaster which will infallibly sound the death-knell of the trade concerned for many a year to come. The facts of the case may be briefly stated as follows:—At the beginning of last week typhoid fever was reported from several towns on the Southern coast, notably Portsmouth and Southampton. After a few days the occurrence of the malady in epidemic form was definitely announced, and Winchester was added to the list of towns involved. Almost simultaneously the disease was traced to oysters obtained from Emsworth, a small town on the South Coast, where the oyster beds are systematically exposed to gross sewage contamination. On November 11th last, a Mayoral banquet was given at Southampton, an occasion which naturally brought together a number of official visitors from neighbouring towns. The consequences have been widespread disaster, as the disease has been distributed broadcast by the consumption of Emsworth oysters at Southampton. In Portsmouth, for instance, at least fourteen cases were traced to the ill-fated civic feast, and the local medical officer of health feared that further cases would yet be notified. In Southampton itself several public men and corporation officials have been attacked. The worst results up to date have followed at Winchester, in which town a leading medical man, Dr. William England, has succumbed to the disease. Another victim was a waiter named Small, who lived at Winchester but was engaged at the Mayoral banquet. The Dean of Winchester, another of the guests, appears to be happily escaping from the grasp of this most perilous yet most preventible of infectious diseases. At Emsworth, the ultimate centre of all this holocaust of suffering and death, thirteen cases of enteric fever are said to exist at the present moment, a fact that abundantly explains the specific contamination of the oyster beds which are so elaborately inundated with the sewage of that primitive municipality. Oysters from Emsworth have doubtless been eaten with impunity so long as the sewage of the town was free from the germs of typhoid fever and of other pathogenic bowel organisms. The advent of an enteric fever patient at Emsworth, however, has laid spark to the gunpowder. The question that will occur first of all to sanitarians is, why the powder magazine was not cleared out long ago, so that any lighted match would be rendered harmless. In other words, dropping simile, why was Emsworth allowed to keep oyster beds at its own sweet will under filthy, revolting, and dangerous conditions? The facts of oyster-borne typhoid have been long before the world, and the special relations of the oyster fisheries, and storage and culture beds to the disease have formed the subject of an elaborate report presented by the Medical Officer of the Local Government Board. How then does it happen that years later the oysters from a notoriously polluted source are permitted to poison persons wholesale? It is customary for the inhabitants of the United Kingdom to plume themselves upon the progressive nature of preventive medicine. In the particular case of oyster-typhoid, however, there is clearly little room for self-congratulation, for no effectual steps have been taken to rob the situation of dangers that have been ascertained some half a dozen years ago with laborious accuracy. Read in this light, the resolution of the Southampton Town Council certainly does not err on the side of hot anger and reproachfulness. "That in view of the serious infection," it runs, "incurred from the eating of shellfish infected with sewage, it be recommended to the Board of Trade that in all cases where there exists an organised system of drainage from urban or rural sanitary districts, the crude sewage shall be efficiently treated by some septic or other process before discharging into the sea or stream under the control of the Sea Fisheries Committee, and to request the Local Government Board to consider and take such action as they may deem necessary." Among pressing domestic reforms that of the sanitary control of the shellfish trade stands well in the front. When a little attention can be spared by the Legislature from the four corners of the earth to the reforms needed at our own doors, then, and then only, will the population of the United Kingdom be likely to get rid of the pestilence that is bred in sewage-polluted oyster beds. Now that a score of corporation officials and a dean of the Established Church have been attacked by typhoid fever, as it were *coram publico*, we may perhaps hope for decisive Government action.

EARL DUDLEY AND THE MEDICAL PROFESSION.

THE opening of the Nurses' Home and new operating theatre at the Adelaide Hospital in Dublin the other day afforded His Excellency the Lord Lieutenant an opportunity of testifying his gratitude to the medical men who have attended on the Countess of Dudley during her late illness, and through them to the medical profession at large. His Excellency has during his stay in Ireland improved on each opportunity that he has had in making himself more popular with Irishmen of every class, and his words on that occasion will go far to increase that popularity with the members of the medical profession. "I, personally, am never likely to forget the deep debt of gratitude that I owe to the surgeons and doctors who have so skilfully watched over the course of Lady Dudley's illness; and, naturally enough, if, during the rest of my stay in Ireland, I am able in any way that I can to show my gratitude in connection with hospitals, or in any other way with your profession in this town, an appeal will never be made in vain." These are straightforward and striking words, and when they are let fall by a man of Lord Dudley's personality they augur that at least the medical profession has a powerful and steadfast friend. The opportunities which are now, and will in the future, be afforded to such a friend of proving his desire to help are many, but, unfortunately, where his Excellency's help is most needed, he will be so invested by the coils of red-tape and of officialdom that he will be a strong man indeed if he succeeds in breaking free. Was it but possible for him to break through these coils, and to use his power as he would himself wish to use it, the opportunity is before him. Could he but effect some of the many needed reforms in the Irish Poor-law Medical Service, when his time came to return to England he could leave Ireland confident that, whatever else he had done, he had assisted to convert a present bondage into a valuable Service, that he had benefited those to whose wants that Service ministers, and that he had more than discharged any small debt which might have been laid upon him by the medical profession through the successful efforts of a few members of it. Even if it is at present impossible, in the nature of things, that Lord Dudley could—no matter how he desired to do so—effect any reforms in the Poor-law Service, he might on his return to England constitute himself a powerful friend were he but familiar with the facts. One of the last acts of Her Excellency, before she was attacked by her serious illness, was to testify to the courage and nobility of character of a member of the Poor-law Medical Service—the late Dr. William Smyth. That gallant gentleman was honoured in his death, but how is many a similar man dishonoured in his life. A few words will tell. He is expected to work early and late for a salary that a mechanic would refuse. If he is ill, or is overworked he must pay for the substitute who does his work while he is absent. If he becomes permanently incapacitated, even by a long life's work spent in the service, he must in many cases retire to want, or he must continue the task for which he is physically incapacitated and die in harness as an alternative to the workhouse. These are the old grievances of the Service which are always present, but, so far from their removal. others are added. If a medical man is summoned to give evidence in a court of law he must pay for a locum tenens in his absence and thus often have to be a loser for the privilege of being of use to his fellows. If a medical man is summoned by the agent of the Poor-Law authorities to help a brother professional in a difficult case, he must either incur the odium which would attach itself to him if he refused to go or he must accept an absurd fee which has been fixed by those whose interests it is to diminish expenses. In other words once a medical man has entered the Poor-law Medical Service he must consent not alone to spend his life at an incessant and badly-paid task, but he must also consent to be turned into the means by which those in authority over him dispense a vicarious charity. And yet the reform of the Service would not be a difficult matter; a little less regard for the pockets of the ratepayers and for the Imperial Treasury, a little less fondness for a cheap reputation for charity gained by the efforts of other people, a little less desire to exploit one profession for the public benefit, and the public would reap the benefits that would accrue from a well-ordered and properly-managed Poor-law Medical Service, and they would be entitled to reap them. Would His Excellency but make himself familiar, not with the official account of the Poor-law Medical Service, but with the service as it really is in many country districts, he would not have long to look for a means of testifying his gratitude. The medical profession will always owe Lord Dudley a debt for the desire to help, but could he impress the points to which we have alluded on the controllers of the destinies of the Poor-law Medical Service, it would owe him a deeper debt for the help itself.

PATHOLOGICAL EVIDENCE AT INQUESTS.

THE not unnatural curiosity which we, in common with our medical contemporaries, have expressed concerning the sudden appearance of Dr. Freyberger as the official pathologist for the metropolis has been gratified in part by the statement of the chairman of the Public Control Committee at a recent meeting of the London County Council, "relative to the employment of a pathologist in making post-mortem examinations in inquest cases." Dr. Freyberger, it seems, was appointed conformably to a recommendation made by that committee and approved by the Council instructing coroners that, in the opinion of the Council, it was desirable that post-mortem examinations in inquest cases of a special nature should be entrusted to a specially skilled pathologist. To this proposition no exception can be taken, indeed it has always been the custom to employ a specially skilled pathologist in cases which from their nature, appeared to render such assistance necessary. The innovation consists in the appointment of a particular person, not by any means the best-known or most eminent in pathology, to carry out these examinations, to the exclusion of the many distinguished pathologists of the metropolis. We are informed that the Public Control Committee had previously arranged with Dr. Freyberger to make analyses in suspected poisoning cases, and "finding that he was an experienced pathologist" who, moreover, was prepared to make the examinations and give evidence for two guineas, they recommended his employment by coroners whenever special skill was required. It is not intended, we are told, that the medical attendant on the deceased should be superseded, and as Dr. Freyberger was only called upon in 34 out of 249 inquests it is suggested that such has not been the case. Incidentally we learn that Dr. Freyberger was wrong in describing himself as "pathologist to the London County Council," and will in future not so describe himself. The fact, however, remains that an innovation which, in the abstract, has much to recommend it, has been made in a hole-and-corner manner which contrasts unfavourably with the practice of public bodies in such matters. We should like to know in virtue of what occult influence Dr. Freyberger has been pitchforked into a post which, if thrown open to competition, would doubtless have attracted an adequate number of candidates with qualifications and experience possibly surpassing those of the committee's nominee. The matter is one in which medical men, as guardians of the public health and as expert witnesses in medico-legal cases, are naturally greatly interested, and had the committee proceeded in a less objectionable manner they would probably have secured the support of the profession in their praiseworthy endeavour to render coroner's inquiries more efficient than is at present the case. We do not care to insist upon the curious fact that it should have been found necessary to requisition the services of a foreign graduate to the exclusion of the many eminent pathologists whose names, or some of them, are household words among medical men, but the selection, if selection it can be called conveys an unmerited slur on native talent which is obviously uncalled for and in other respects objectionable. It is highly desirable that the matter should be thoroughly threshed out, because the explanation given by the chairman of the committee places the appointment in an even more dubious light, and we are convinced that the transaction will not secure that measure of public opinion in its support at which public bodies must, or should, always aim.

Notes on Current Topics.

Tube Railway Ventilation.

Before any more deep level railways are authorised it is to be hoped that some assurance will be obtained of the provision of more efficient ventilation than has so far been found practicable on the lines already in existence. For some reason the Central London Railway has proved specially faulty in this respect, and the analyses to which publicity has been given by the *Daily Mail* only confirm those previously made by independent authorities. It is hardly necessary to point out that when carbonic acid gas is taken as the measure of organic contamination, its presence in excessive proportions is of immensely greater significance than when, as in the atmosphere of London, it is largely due to the escape of the products of combustion. In view of this fact the presence of from ten to twenty parts of carbonic acid in the air of the tunnel, and especially in the carriages, is a matter of the highest importance. To remedy the existing state of things will tax the resources of engineers to the utmost. No measure which merely provides for a daily change of air will be satisfactory; for the tube to become even moderately healthy the ventilation must be constant and effectual, and, so far, no means have been suggested to secure either constancy or efficiency at times when the traffic is heaviest. We hesitate to affirm that the problem is likely to prove insoluble; but until it has been solved it behoves our legislators to hold their hands in the matter of authorising further tube construction.

Gangrenous Appendicitis.

Our Transatlantic *confrères* have, with characteristic conciseness of expression, applied the term "green groin" to the physical condition which develops when a violent attack of appendicitis passes on to gangrene of that so frequently troublesome organ. From the proximity to the surface the decomposition —especially in spare subjects—rapidly comes to engage the subcutaneous tissue and skin, thereby producing the characteristic discoloration. And in a recent contribution to this subject, which appeared in the pages of the *New York Medical Record*, Mr. Joseph Price expresses the opinion that such cases would be more truly described as "gangrenous appendix" than as appendicitis. The appendix when exposed is found to be in a state of sphacelus, with one or more perforations, and free leakage. The pocket of the right groin above Poupart's ligament is found to contain a large quantity of lemon-coloured septic fluid; and there are extensive omental and intestinal adhesions. There occasionally coexists a "Derby-hat" form of abdomen, within which the entire peritoneal cavity will be found filled with extravasated bowel contents, lymph, and other inflammatory products. The symptoms have sometimes closely simulated those of typhoid fever, and require keen discriminating skill for differential diagnosis. The fact that a considerable number of even such virulent cases recover after reaching this stage gives hopeful testimony towards the general prognosis of appendicitis.

Deaths Under Anæsthetics.

The large number of deaths occurring from the use or misuse of anæsthetics during recent weeks has caused considerable alarm among many of the newspaper-reading public. No doubt it is most desirable that every death occurring under such circumstances should be subjected to impartial and public investigation, but we venture to think that to a great extent, and all unwittingly, not a few coroners and journalists have recently done much to hamper medical science and needlessly alarm many nervous members of the community. Considering the enormous use made of general anæsthetics, the proportional mortality was probably never so low as it is at the present time. At no former time was greater care exercised in the preparation of the anæsthetic, the education of the anæsthetist, and the protection of the patient; and although we would gladly see still greater advancement made in the proper training of all medical men in the administration of such powerful agents as chloroform and ether, yet we strongly deprecate improvement by panic. We trust the discussion of medico-legal matters at the meetings of the recently-formed Medico-Legal Society will do much to encourage coroners in viewing such a matter as we have now referred to in its medical and scientific aspects as well as from the judicial and public point of view.

Infantile Prostatic Sarcoma.

Since Home's great monograph every student of medicine recognises that hypertrophy of the glandular tissue of the prostatic gland is the most common of its abnormalities. This hypertrophy is essentially a senile condition, and is simulated by pathological conditions occurring in early life. M. Potesco has placed on record a very interesting case of this nature. A child, one year and nine months old, came under his care in February of this year; it suffered pain on passing water and was constipated. There was a suprapubic swelling, and a rectal examination detected an enlarged prostate. The bladder was opened through the abdomen, and a sarcoma the size of a closed fist found. It has its origin from the prostatic portion of the urethra. Surrounding the urethral opening there was a thick ring of small polypoid tumours. Sarcoma, though more common in the human prostate, is a very unusual disease of the gland, and particularly so in such a young subject. The case is, moreover, interesting from a clinical point of view, as showing the necessity for a thorough examination in all cases of children complaining of bladder troubles. The case at no time offered any hope of success, though life might have been prolonged by inserting the ureters into the rectum and excising the sarcoma.

The State and the Climate.

Although the most pugnacious member of the Opposition can hardly accuse "the Government" of being responsible for the condition of the British climate, there is a sense in which the State may well play a part in facilitating measures for the improvement of, say, London's atmosphere, or, at least, securing sounder knowledge of meteorological conditions. We are glad to see that Mr. Balfour is not unmindful of this duty, and in order to inquire into the administration of the Meteorological Council and the means by which the interests of meteorological science may be furthered, the following Committee has been appointed:—Sir Herbert E. Maxwell, M.P. (chairman), Mr. J. Dewar, M.P., Sir W. de W. Abney, Sir F. Hopwood (Board of Trade), Sir T. H. Elliot (Board of Agriculture), Mr. R. T. Glazebrook, Mr. T. T. Heath (Treasury), and Mr. Joseph Larmor, F.R.S. Mr. G. L. Bristow, of the Treasury, will act as secretary of the Committee. We could have wished that medical climatology had received more prominent recognition on this Committee, for, after all, meteorology is perhaps mainly of importance in so far as it influences, directly or indirectly, the health of the people.

Gall-Stones.

The time when operative treatment is called for in cases of hepatic colic from the passing of gall-stones must rest on the conditions of each individual case; but early surgical intervention is, as a rule, to be recommended unless the case presents some feature that prohibits operation. A case recorded by Signor Braquehnye at the recent French Congress of Surgery strengthens this view. A patient, who suffered from the jaundice of obstruction, and who from to time passed gall-stones in his stools, finally recovered, but afterwards was attacked by severe pains in the region of the gall-bladder. A laparotomy revealed an empty gall-bladder with adhesions to all the neighbouring viscera. Now, it is reasonable to suppose that an early operation would have obviated this risk of localised peritonitis, which, from the many adhesions of the viscus, appear to have followed on the passing of each gall-stone. The question to be answered is: What gives the best immediate results and what the best after-results? The patient naturally shrinks from operation and prefers the olive oil, laudanum, or chloroform, or, at least, is anxious such medication should have a trial, and it requires some moral courage to recommend an operation, but in view of the better after-results and for the relief to the patient's mind that there are no more calculi to be passed, we think operative treatment is, as a rule, the preferable procedure.

Alcohol and Research Work.

Although alcohol is sadly abused by an all too-numerous section of the community, and restraint is necessary in limiting the evil as far as possible, yet it must be remembered that alcohol is a very important and necessary agent in research work. A number of scientists, acting in accordance with instructions received at the Glasgow meeting of the British Association, have approached the Board of Inland Revenue with a view to obtain relief from the heavy taxation on pure alcohol used in scientific laboratories and where higher teaching and research are carried on. Regulations have now been issued whereby ethyl and methyl alcohol may now be supplied to duly recognised places and under special restrictions, so that another of the fetters limiting scientific research in this country has been loosened. But we trust that those scientific institutions availing themselves of this relief will rigorously ensure the use of this alcohol for legitimate purposes, and stringently protect those who may in any way be tempted to lapse into irregular forms of inebriety.

An Unusual Sequel of Ovariotomy.

The removal of both ovaries, as is well known, is often followed by unpleasant results, but M. Bovey's two cases of intense pruritus following double ovariotomy are too unusual to pass unnoticed. The cases occurred at an interval of years, and in both the itching was so intense that the patients lacerated their skin by constant scratching. All the ordinary remedies — buttering, ointments, lotions, and such like—failed to give relief until fresh ovaries of the calf were tried in 1·50 grain doses daily. What the relationship is between the ovary and the sensory cutaneous nerves we know not, but that there is some correlation the cases go a long way to show.

Surgery of the Hip-Joint.

When in 1869 M Ollier first recommended operative interference with the hip-joint for tuberculous disease of the femur, his suggestion was so much in advance of the surgery of the day that it did not meet with general approval. A deep wound through vascular tissues meant in the sixties profuse suppuration, "laudable pus," hectic fever, and too frequently death. Aseptic conditions, have, however, changed all this, and not only has M. Ollier's operation been adopted, but his principles of surgery have been applied to other pathological conditions of the joint. M. Janesco, of Bucharest, has in cases of old-standing femoral dislocation, where the ordinary methods adopted for the replacement of the head of the bone have not been successful, cut down on the joint and excised the head of the femur, and approximated the apex of the great trochanter to the cotyloid cavity. He makes provision for drainage by trephining the trochanter, and through this channel he passes gauze into the floor of the cavity. The operation is not a new one; in a few exceptional cases it has been done in the past. But to M. Janesco should be given the credit of demonstrating its safety and advocating its adoption as the accepted treatment in old-standing femoral luxations.

The Ventilation of Factories.

A new era in the scientific ventilation of factories bids fair to be inaugurated under the guiding hand of the Departmental Committee appointed to inquire into the question. The first report of that body has appeared in the shape of a blue-book, with appendices. The great principle is recognised that the ordinary standard of cubic space per head affords no reasonable guarantee of proper ventilation. It is proposed to substitute the more trustworthy test of chemical analysis, whereby the amount of carbonic acid vitiation can be accurately determined. It is consequently recommended that, under the powers conferred by the Factory Act, 1901, a standard of ventilation be prescribed for all classes of factories and workshops, so that the proportion of carbonic acid in the air at the breathing level shall not, except on foggy days, rise beyond twelve volumes of carbonic acid per 10,000 of air. When gas or oil is used for illuminant purposes the proportion shall not exceed twenty volumes after dark or before the first hour after daylight. Due allowance is further made for extra carbonic acid resulting from trade processes, as in breweries. It is also recommended that notice of the result of analyses be communicated to employers, and that a reasonable time be allowed to permit alterations, which will be followed by further air tests. Arrangements are suggested for the purpose of engaging the services of a specially qualified person to conduct the analyses for the Factory Department of the Home Office, and for the appointment of inspectors, if desired, who will be able to test the air on the spot by means of a suitable apparatus.

Nurses and Plague Work.

The return of the nurses who for the last three years have been on plague duty in India has been at length officially notified. Our contemporary *Truth*, in drawing attention to that fact, suggests that a special recognition should be made of the particularly arduous and repulsive work done by these devoted women. In many ways their service has been more dangerous and exacting than that undertaken by Army nurses in South Africa and China, for which numerous medals have been awarded. Several nurses have died of plague, and in our opinion have thereby earned a right to the highest distinction which can be bestowed upon the memory of any member of the community who has sacrificed his or her life for the good of mankind. The Victoria Cross is justly earned by a brave soldier by facing the foe or by rescuing a wounded comrade. His momentary valour, however good and commendable though it be, weighs light in the balance compared with the calm and sustained courage of the nurse who tends plague-stricken natives month after month and year after year, away from the excitement of war and conflict. Nothing need be said about the fact that the saving of life is obviously a higher motive than its mere brutal destruction, inasmuch as the soldier acts under orders, and war is unhappily only too often a necessary evil in the present imperfectly developed stage of the world's morality.

The Imperial Vaccination League.

The Imperial Vaccination League, under the presidency of the Duke of Northumberland, has now entered upon the active stage of its existence, the first meeting having taken place a few days ago. We may remind our readers that the object of the League is to place more clearly before the public the immense value of vaccination and revaccination, and to study the operation of the Vaccination Act of 1898 in the hope of being able to formulate improvements which will tend to diminish opposition. With this object in view, certain special questions are being investigated by committees of experts, such, for instance, as to the desirability and possibility of compulsory revaccination before the legal age for employment, the transference of the administration of the Acts from the Guardians to some other body, the supply of lymph, and to define a standard of "efficient" vaccination. The chairman pointed out that some, at any rate, of the difficulties which had been met with were probably due to a failure to appreciate the importance of certain objections, although most of these had been obviated by the employment of glycerinated lymph. He spoke hesitatingly on the question of compulsion, and deplored sundry features of recent legislation. The Bishop of Stepney urged that they of the League should not only endeavour to spread the truth, but also to remove the causes by which the truth about vaccination had been misunderstood. An executive committee was elected, and arrangements made to carry on the work. In view of the imminence of fresh legislation on the subject there is evidently no time to be lost. The League may rely upon the cordial support of the medical profession, and we trust also that of the educated classes of the community.

Cockles and Typhoid Fever.

At the present moment, when the public attention has been so forcibly directed to the question of shellfish-typhoid, the recent report of the Medical Officer of Shoreditch has a peculiar appropriateness. The oysters which played so disastrous a part at the Southampton civic banquet in spreading enteric fever through various neighbouring towns, gives way to the cockle in Dr. L. F. Bryett's interesting and valuable remarks on the typhoid outbreaks that raged in the East End of London last July and September. He attributes the epidemic solely to the sufferers having consumed cockles while holiday-making at Southend-on-Sea. The cockles were from beds situated in the Leigh Creek, about a quarter of a mile below the outfall of the Leigh Sewage Works. It has been shown that the Bacillus typhosus is capable of surviving in the interior of a cockle that has actually been subjected to the process of boiling. This disquieting information should make the Local Government Board more than ever alive to the necessity of adopting or securing drastic measures of control over shellfish beds and ponds. Curiously enough, the information in question was furnished to the Board by one of their own investigators, and they have been fully informed by special inquiry as to the environment of every important oyster and shellfish bed in the United Kingdom. Among others the filthy pollution by sewage of the Leigh beds was fully exposed. Does the Board think that their responsibility ceases now that the public is authoritatively informed of the magnitude and exact location of the danger?

Small-pox in the Provinces.

The London outbreak of small-pox appears to have exhausted its violence, although it would be premature to assume there will be no further access of epidemic activity. Signs are not wanting, however, to show that the vast amount of infective material recently engendered in the metropolis will act as a centre of ever widening circles of infection throughout the United Kingdom. During the past twelve months that fact has been abundantly illustrated again and again in England, Scotland, Ireland, and Wales. At the present moment tramps are carrying the disease about the country with their usual well-recognised certainty and impartiality of distribution. Their wanderings to and fro over the face of the land appear meanwhile to be regarded by many of our local governors with a spirit of fatalism that an Oriental despot might envy. It would be far more practical to apply quarantine to tramps or to secure their control in other ways than to build hospitals, and to prepare to give the enemy a warm reception. A significant note of alarm has recently been uttered at Salford, where the Corporation have issued a notice asking the public not to attend football matches for the present, except in Manchester and Salford. The reason given for this request is that small-pox is prevalent in neighbouring towns in Lancashire and Yorkshire. It would be interesting to know whether the Salford authorities have displayed a prudence with regard to tramps equal to that which has dictated their football policy.

The Standardisation of Drugs.

The more one considers the question of the standardisation of drugs, to which attention was first called by Mr. Moore in his recent work entitled "Suggestions for the Standardisation of Purity in Drugs," the greater is the importance it assumes from the point of view of the prescriber. Mr. J. C. Umney's elaborate contribution to the discussion is based on a very comprehensive inquiry into the matter, and he makes several suggestions of practical value. It is easy enough to standardise a preparation of a drug which owes its activity to a particular alkaloid; but, after all, the simplest plan in such case would be to employ the alkaloid itself. But there are others which act in virtue of a mixture of alkaloids, and for these the only method must be the estimation of the tota alkaloids, although this leaves their relative proportion open to variation. Then, too, there are drugs which do not owe their activity to alkaloids or active principles of which we know enough to allow of accurate estimation, and there is a further class which can only be measured by the amount of extractive, such as aloes, cascarilla, &c. Mr. Umney urges the official recognition of "average standards," of which he has taken the trouble to draw up a long list. These would be penal standards when adopted, and then, at any rate, we should have something to go by.

A New Railway Risk.

The prospect of being able to travel by rail at the rate of a hundred miles an hour or so, by the substitution of automobile carriages for the ordinary heavy locomotive and train, is an enticing one to those whose nervous systems do not shrink from such rapid motion, especially as less vibration is likely to be experienced than is the case with the heavy and comparatively slow trains of the present *regime.* There is one detail, however, which goes far to extinguish the enthusiasm felt at first sight. Each automobile railway carriage, it seems, will carry a supply of highly inflammable liquid fuel varying, according to the distance to be traversed, from thirty to eighty gallons. Now our railway managers have themselves recognised the dangerous nature of this fluid by imposing the most irksome restrictions on its transport over their lines and although, if the automobile system be adopted—and an announcement to that effect in regard to one line has already been made—proper precautions will doubtless be taken to prevent the possibility of leakage and consequent explosion or fire. One shudders to think of the inevitable result should an automobile train leave the rails or sustain anything of the nature of a collision. To the usual, and already serious, risks to which passengers are exposed in the event of a railway catastrophe will be superadded the quasi-certainty of an instantaneous and gigantic conflagration involving the whole of the wreck. The only set-off to this contingency is that the passage of the petroleum vapour into the lungs would probably determine insensibility forthwith, partly by asphyxia and partly in virtue of its poisonous effect on the blood. However regarded the prospect is an unlovely one; for the margin of safety which exists in regard to possible mangling or other form of physical deterioration appears likely to be sacrificed altogether should the craze for ultra-express trains lead to this system being adopted.

Sleeping Sickness.

This remarkable disease, the pathology of which is still obscure, has hitherto been regarded more or less as of the nature of a curiosity; but Dr. Low's report brings home to us the fact that it exists in a highly epidemic form, having already caused the death of 70,000 natives in Uganda, some 15,000 more actually suffering therefrom. The disease is practically always fatal, so that the increased virulence with which it is credited must bear on its rate of spreading rather than its gravity. The natives are terrified, and move from one area to another *en masse*, so that large tracts of country are rendered desert. No doubt is entertained of the bacterial origin of the malady, and there is reason to hope that the specific germ may shortly be identified, but between its identification to the stamping out of the disease there is a wide gap. The symptoms and pathological changes point to the existence of a peculiar form of meningitis which, like most other forms of meningitis, is absolutely refractory to treatment.

Medical Men and Out-Patient Departments.

At Leigh, near Manchester, an infirmary is about to be erected on a site given by Lord Lilford, and the Town Council have decided to have an out-patient department and dispensary in connection therewith. The local practitioners have entered a formal protest against this addition to the original scheme, and refuse to provide an honorary medical staff unless their services be restricted to in-patients. The Committee of Management will therefore endeavour to carry on the work with the assistance of two or more resident house surgeons—it remains to be seen with what success. This opens up a question which before very long will come to the front in connection with hospitals everywhere. The abuse of medical charities from which the profession as a whole suffers so severely is mainly in the out-patient departments of hospitals, and much more stringent provisions than have hitherto been attempted will have to be made before any tangible improvement can be hoped for. If the out-patient department were limited to the sick poor suffering from diseases certified to call for special skill in diagnosis or treatment the abuse would cease, and medical men would gladly avail themselves of the department to assist them in difficult cases. The concerted action of the Keighley local practitioners is a sign of the times, and we trust is but the prelude to similar action on a larger scale.

Coroners and Fees to Hospital Medical Officers.

At an inquest held at Keighley last week the coroner referred to the recent rule which debarred him from paying a fee to medical men in connection with any case in which the patient had been taken to a district hospital. With commendable frankness he declared this restriction to be "a monstrous shame," and he called attention to the iniquity of depriving a practitioner of a well-earned fee merely on the ground that he gave his gratuitous services to a local hospital. The injustice of the rule is so obvious that we are surprised individual practitioners have not ere this taken steps to protest. There are several ways of protesting, and the first would be for every practitioner so aggrieved to bring his grievance before the proper authority. Should this course not be productive of reform, concerted measures will have to be taken to secure the removal of this flagrant injustice. Even in respect of medical hospital officers in receipt of a salary, always nominal in amount, we see no reason why they should be asked to give evidence for nothing. But to debar the honorary members of the staff from remuneration is so palpably unjust as to render further argument unnecessary.

Unqualified Practice.

The coroner for the Marylebone District last week investigated a case in which a young unmarried woman died under suspicious circumstances. At the post-mortem examination evidence was found pointing to the performance of an illegal operation, with subsequent blood-poisoning. Deceased had been attended by one Caleb Whiteford, formerly a member of the English College of Surgeons, but disqualified some years ago upon being sentenced to a term of penal servitude. This person is carrying on medical practice at a dispensary, in spite of the fact that his name has been erased from the *Register*. The law thus allows the General Medical Council to remove a practitioner's name from the list of persons qualified to practice, but does not empower that body to prevent his continuing unqualified practice. This absurd anomaly is taken advantage of by many disqualified persons, of whom notorious examples are at present to be found in the Metropolis in the cases of Allinson, Alabone, and Whiteford. It seems almost incredible that Whiteford, in the light of previous experience, should allow himself to be involved in another "West-End Mystery," as the newspapers describe the case. When giving evidence he stated he was prepared to give a certificate of death if necessary. It would be interesting to know how many of these illegal certificates have been accepted by local registrars and what the Marylebone coroner has to say upon the subject. In the case under investigation the jury returned an open verdict, but it is hardly to be supposed that the police will permit the matter to end there.

It is stated that Miss Glendenning, a trained nurse, has brought an action to recover damages to the extent of £1,500 for alleged breach of promise of marriage against Dr. John W. Byers, Professor of Obstetrics and Medicine, Queen's College, Belfast. The defence is based upon a denial of the alleged promise.

PERSONAL.

Lord Lister has been created by the King of Denmark a Knight Grand Cross of the Order of Dannebrog on the occasion of his jubilee.

Dr. Henry R. Oswald has been appointed by the London County Council Coroner of the south-eastern district at a salary of £943 10s. per annum.

Dr. Norman Moore has been elected Physician to St. Bartholomew's Hospital, and Mr. W. Bruce Clark Surgeon to that ancient institution.

Professor Francis Darwin, F.R.S., Sir Andrew Agnew, Bart., M.P., and Sir John Williams, Bart., M.D., have joined the Imperial Vaccination League as vice-presidents.

Dr. Nothnagel, Professor of Clinical Medicine and Therapeutics at the University of Vienna, has been nominated a life member of the Upper House of the Austrian Parliament.

Mr. G. G. Hamilton, M.B., F.R.C.S., has been appointed to the post of Honorary Surgeon to the Liverpool Royal Infirmary, rendered vacant by the resignation of Sir William Banks.

Dr. Poirier having been appointed Professor of Anatomy to the Paris Faculty of Medicine, a congratulatory dinner was offered him last week at which M. Waldeck-Rousseau took the chair.

A **special** reception is to be held by the Lord Mayor of Liverpool and the Lady Mayoress to congratulate Professor Ronald Ross, C.B., F.R.S., on his selection as the recipient of one of the Nobel prizes.

Special Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents.]

SCOTLAND.

[FROM OUR OWN CORRESPONDENT.]

The Principalship of Edinburgh University.—A meeting of the Curators of Patronage was held on the 16th inst. for the purpose of considering the vacancy caused by the retirement of Sir William Muir. All the curators were present except Treasurer Cranston, who was indisposed. No definite selection was made on this occasion, the curators resolving to adjourn until the 20th prox., when an appointment will probably be made. It is neither the practice to advertise such a vacancy nor otherwise to invite applications for the post. While several names have been suggested as possible, there is a very general belief that the post will be offered to Sir William Turner, the present Professor of Anatomy in the University, and President of the General Medical Council, whose strength of character and unrivalled knowledge of University business have for many years given him a high position in all the counsels of the University.

Bangour Asylum Scheme.—Allusion has already been made more than once in these columns to the very unsatisfactory state of matters into which this scheme has drifted. The Edinburgh District Lunacy Board had before them, on December 15th, a communication from the Lunacy Commissioners which seems to provide a simple and feasible solution of the present difficulty as to the accommodation of the insane poor, and which will also, in all probability, effect a considerable saving to the rates. The Lunacy Commissioners in effect insist, under the powers conferred by Act of Parliament, that the District Board take immediate steps to provide for their insane poor, and suggest that they should do so by erecting on the Bangour estate five wood and iron structures capable of accommodating forty patients each. The Commissioners sanctioned the erection of such structures at Woodilee Asylum, Glasgow, last June, and they are now in working order. Their cost, including electric light, water, heating, and furniture, works out at £125 a bed. The Commissioners are satisfied that, if properly constructed and attended to, these buildings will endure for a very long period, and have accordingly recognised them as part of the permanent structure of the Woodilee Asylum. Four of the proposed buildings are to be for patients, and the fifth for administrative purposes, while eventually all would be available for easily managed male patients, and would render unnecessary the erection of a corresponding number of villas. The recommendation of the Commissioners was approved by the Board, and it was accordingly arranged that the asylum committee should visit Woodilee with a view of erecting similar structures at Bangour forthwith.

Sanatoria for the Consumptive Insane.—Two sanatoria for this purpose were opened last week by the Glasgow Lunacy Board—one at Gartloch, the other at Woodilee. The type of construction used throughout is novel in such buildings. It is of a composite wood and iron character, on a system of air-spaced walls, patented by the designers of the building, Messrs. Spiers and Co., Glasgow. The interior covering is a peculiar papier-mâché composition, and presents a surface like plaster, absolutely non-porous and jointless, all angles and corners being rounded so as to allow of efficient disinfection. For the rest the buildings have ample air space, and the large ventilating windows, verandahs, &c., usual in sanatoria. Accommodation is provided in all for 162 patients, and the buildings were handed over to the Board ready for occupancy in the brief period of sixteen weeks from the commencement of the work. The cost is about one-third of a stone and lime erection.

Presentation to the University of Edinburgh of a Bust of Sir William Muir.—Some four or five years have elapsed since a movement was set on foot to have a bust of Sir William Muir executed that it might be placed with the memorials of distinguished principals and professors in the Library Hall of the University. The completion of the work was unavoidably delayed, and the bust was formally unveiled by Lord Kinross only a few days ago. Lord Kinross, in eulogising their late Principal, alluded specially to his friendship for the students, shown in a practical way by the interest he had taken in the erection of the Students' Union, and in the establishment of women's halls of residence, one of which bore his name. Sir William Turner, as the senior colleague of the Principal, accepted the bust on behalf of the University, and Sir William Muir, who was present at the ceremony, made a few remarks. The bust was considered an excellent likeness while it was exhibited at the Royal Scottish Academy; it is the work of Mr. Charles McBride.

Special Article.

THE MIDLAND MEDICAL UNION.

The annual meeting of the Midland Medical Union was held at the Hotel Portland, Chesterfield, on Thursday, December 4th, 1902, at 4.30 p.m., the President, J. Goodwin Shea, Esq., M.D., J.P., in the chair.

After the election of officers, reports, of which the following are summaries, were presented and adopted:—

During the past year the work of the Union has concerned the outlying districts more particularly than Nottingham. The branch at Nottingham has, therefore, little to add to the reports from Mansfield, Chesterfield, and Belper.

With regard to the executive, it should be stated that there have been six meetings of the Council, one of which was held at Chesterfield and the rest at Nottingham. The principal business transacted at such meetings was the consideration of the Teversal matters and of the Medical Aid Association at Chesterfield.

The appeal made under the authority of the Council to aid Dr. Rainsbury in defraying the judgment in the case of Webster *v.* Rainsbury met with a generous response. The total amount required was £182 6s. 2d., and the appeal has up to the present realised £71 15s. 9d., leaving a balance of £110 10s. 5d., which has been paid by Dr. Rainsbury.

During the past year the work of the Chesterfield branch has been devoted chiefly to dealing with the rate of remuneration paid by the Friendly Societies in this district. In the last annual report it was stated that a conference was to be held between representatives of the Union and the Chesterfield and District Friendly

Societies Council. This was duly held, and was followed by several others. It was hoped that these would lead to a fair and amicable settlement, but there were parties in the Friendly Societies at work from the first who were opposed to any fair consideration of the question, and these ultimately succeeded in persuading the Friendly Societies Council to send to this Union a resolution couched in such terms making it virtually an ultimatum that, unless it was acceded to, they would at once proceed to form a medical association. The terms of the resolution were so unreasonable in character that it was felt no good could possibly arise from further conferences, and consequently negotiations were discontinued. This was followed by notices being served by a number of lodges upon their medical officers.

The present state of affairs is that a number of these notices will expire at the end of the year, that the Friendly Societies have established a Medical Association and have secured the services of a medical practitioner.

The most satisfactory part of this dispute is the fact that all the members of the Union have remained loyal to each other, and that each member recognises he is helping, perhaps at some pecuniary loss, to fight a battle not only for himself but for the profession generally. It is gratifying to note that though the Union is a young society the laity are beginning to realise that they cannot trample down the profession as it has attempted heretofore, and disputes are now referred to the Union to be settled which before would only have been dealt with by the individual, and, as a rule, with grave injustice ensuing. This, with the exalted *esprit de corps* now prevalent, is one of the greatest benefits members of the Union have yet secured by uniting together for our common welfare.

Drs. Palmer and Allen also presented reports from Mansfield and Belper respectively, which were adopted.

The President referred to a dispute between Drs. Rainsbury and Mitchell on the one hand, and Drs. Crawford and Farman on the other, which had arisen in the Mansfield District with regard to certain professional and ethical questions associated with the medical appointments to the Teversal and Stanton Hill Collieries, which had been the subject of a conference held at Nottingham on December 2nd, and which had resulted in a satisfactory and amicable settlement. He read to the meeting a letter written to him by Dr. Bateman, the general secretary of the M.D.U., who attended the conference at the desire of all parties concerned, and in which he set out the conclusion at which the conference had arrived, that, after hearing the evidence of the gentlemen who felt aggrieved and the evidence in defence, it was clearly proved that the gentlemen against whom complaint had been made had not been guilty of any unprofessional or unethical conduct, and were entirely absolved from the grounds of complaint which had been alleged against them. The president added that he was pleased to report that he hoped an amicable settlement had been arranged, and a friendly relationship also been restored between the parties to the dispute, and he only regretted that the conference had not been held months ago, since it now appeared that if such a course had been taken the friction which was now shown to be groundless, and had so long existed between certain professional brethren in the neighbourhood, would have thus been easily removed. He moved that an account of the con-ference and the decision thereat be made known to the profession, and that Drs. Crawford and Farman be consulted as to the steps to be taken to effect their object.

Dr. E. H. Houfton seconded, and observed that the evidence given before the conference convinced all present that the allegations preferred could not be sustained. He suggested that the result of the conference should be communicated to the professional journals for publication.

Dr. Worthington, in supporting the resolution, said he thought it was only fair that everything should be done to make the decision widely known.

Dr. E. Wearne Clarke also supported the resolution, which was carried unanimously.

The General Secretary read a letter from Dr. Pope, of Leicester, inviting the Union to amalgamate with the Leicestershire Branch of the British Medical Association.

Dr. Mutch proposed that the matter be referred to the Chesterfield Branch.

Dr. E. Wearne Clarke seconded, and the resolution was carried without further discussion.

Later in the evening the Midland Medical Union held its annual dinner at the Hotel Portland. Among those present were Dr. J. Goodwin Shea (in the chair), J. Court, J.P., Martin, Wm. Dyson, J.P., S. Snell, J.P. Geo. Booth, J.P., Lewin, C. J. Palmer, Rainsbury, A. Hall, Houfton, E. W. Clarke, Peck, A. W. Shea, C. Palmer, Corkery, Burgess, S. Worthington, A. Palmer Croskery, W. J. Symes, Duncan, W. W. Robinson, Edmunds, Porter, Leary, Green, R. J. Pye Smith, B. Lee, J. H. Booth, and the general secretary, Mr. Geo. S. O'Rorke.

Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents].

THE CASE OF DR. RAINSBURY.

To the Editor of The Medical Press and Circular.

Sir,—I am desired by the Council of the Midland Medical Union to acknowledge through The Medical Press and Circular, the further contributions to the fund raised to aid Dr. Rainsbury in discharging the judgment given against him under the circumstances which have been reported in these columns, and which has fallen as a great hardship upon him.

In making this final appeal, I am desired by the Council to thank those who have so generously contributed, and to express the hope that some further contributions may be received towards the balance of £110 10s. 5d. which still remains.

I am, Sir, yours truly,
Geo. S. O'Rorke, Secretary.

December 17th, 1902.

	£	s.	d.
By contributions already acknowledged	69	3	9
„ K., H.M.S. *Renown*		10	0
„ Dr. S. Worthington, Chesterfield ...	1	1	0
„ Dr. J. H. Noble, Nottingham ...	1	1	0
	71	15	9

To the Editor of The Medical Press and Circular.

Sir,—We are directed by the Council of the Midland Medical Union to communicate to you for publication in your columns the result of a conference which has recently been held in Nottingham for the purpose of enquiring into and deciding upon certain professional and ethical questions associated with certain colliery appointments in the neighbourhood of Mansfield, and which have been the cause of local friction among members of the medical profession, and at which a satisfactory result was obtained.

The *raison d'etre* of the conference had reference to the manner in which certain medical appointments to the Silver Hill and Butcherwood Collieries of the Stanton Ironworks Company were held by Drs. Rainsbury and Mitchell, and were given to and held by Drs. Crawford and Farman in succession to Drs. Rainsbury and Mitchell, and in connection therewith the two latter gentlemen felt that they had cause for complaint on both professional and ethical grounds.

Prior to the conference all matters complained of were formulated by the parties preferring them, and agreed to by those against whom they were directed, as being the object of the conference proposed to be held to inquire into them.

The conference was held at the Victoria Station Hotel, Nottingham, on Tuesday, December 2nd, and there were present the following gentlemen:—Drs.

Oldham, Houfton, Palmer, Rainsbury and Mitchell as representing the Midland Medical Union; Drs. Crawford and Farman and Messrs. Piggford and Greatorex, the two last-named gentlemen being officials of the collieries referred to.

Dr. J. Goodwin Shea, J.P., of Chesterfield, President of the Union, presided, and Dr. Bateman, General Secretary of the Medical Defence Union, attended the conference at the desire of all parties with a view to elucidating the matter involved.

Evidence was given by Drs. Mitchell, Rainsbury, Palmer, Crawford, and Farman, Messrs. Piggford and Greatorex, and documentary evidence was also produced.

After an exhaustive inquiry, in which every party to the dispute was permitted to take part, and after all evidence for and against the truth of the charges was given, it was quite clearly proved that the charges made against Drs. Crawford and Farman could not be sustained, and were not borne out by the evidence given to support them.

As a result of the conference Drs. Crawford and Farman were entirely exonerated from any unprofessional and unethical conduct, and a complete, amicable and cordial settlement of all matters in dispute was arrived at.

We are directed to add that the Council of the Union desires that the result of the conference should be made known to the members of the profession. With this object Drs. Crawford and Farman have been consulted, and it is with their approval that this letter is written.

I am, Sir, yours faithfully,
J. Goodwin Shea, M.D.,
(President.)
George S. O'Rorke, LL.B.
(Secretary), Midland Medical Union.

Albion Chambers, King Street, Nottingham,
December 12th, 1902.

THE BATTLE OF THE CLUBS.

To the Editor of The Medical Press and Circular.

Sir,—Protracted wars become monotonous and even irksome, especially to those who have to pay for the shot. The most protracted battle I am acquainted with is "the battle of the clubs." The clubs believe in concentrating their forces, the doctors in guerilla warfare—a shot fired here and there—and occasionally one of the enemy is mortally wounded. The current number of the *British Medical Journal* contains a letter suggesting that certain members of the attacking force should be called "outsiders." Therefore we have traitors in our camp who forget that union is strength. Why cannot we concentrate our forces? Surely this can be done through our local medical societies. The opinions of members could be obtained. Then a mass meeting summoned to some convenient centre. Each medical society could send its representative or representatives. The expenses of delegates could be defrayed by the societies they represent. The expense would be small compared with the benefit which would accrue. The clubs would see that we were in earnest and act accordingly. As for the "outsiders," we know how to treat them. Nature knows how to act; we are all aware of the law, "survival of the fittest." We are causing the protraction of this war. We are the sufferers. It is not merely a matter of loss of £ s. d., but loss of prestige, loss of health, and loss of knowledge. Club mixtures do not tend to improve our therapeutical knowledge, and I fear that the diagnosis of club cases is often very superficial. Lung diseases are often diagnosed through coat, waistcoat, shirt, vests, and chest protectors. Abdominal pain or vomiting is charmed away by the soothing red mixture or remains until Nature diagnoses the case for us. This is not medicine, it is charlatanism, and we become charlatans.

I am, Sir, yours truly,
Dec. 22, 1902. Anti-Club.

Obituary.

THE LATE PROFESSOR YOUNG, GLASGOW.

Dr. John Young, who was appointed Professor of Natural History in Glasgow in 1866, and retired at the close of last session, died on the 18th inst., in his sixty-seventh year. He was one of the few remaining of the older race of Glasgow University Professors, only one of his contemporaries, Professor Ramsay, still holding office in the University. He was of Forfarshire family, and a graduate of Edinburgh University. At first he directed his attention to mental diseases, and was an assistant at Morningside Asylum, but gradually his interests turned more and more towards zoology and the allied sciences, and for the six years immediately preceding his election to the chair of natural history he was on the geological survey. Dr. Young did not limit his energies to his University work, but was a man of great versatility. He was a pioneer in the movement for the higher education of women. He had strong leanings to antiquarian lore, and was an authority on local archæology. Of strong musical tastes, he was a founder of the Scottish orchestra. Besides this, he took an active interest in all medical charities, as well as other social movements. He was the keeper of the Hunterian Museum, and in 1893 was honoured with the Presidency of the Educational Institute of Scotland.

STEWART STIRLING, M.D., F.R.C.S.E.

The death is announced at Edinburgh of Dr. Stewart Stirling, a well-known authority on diseases of the skin. Dr. Stirling, who was in the fifty-eighth year of his age was born at Drumessie, near Kilsyth, where his father and grandfather had been farmers, and was educated at the parish school of his native place, and for medicine at both Glasgow and Edinburgh Universities. He practised in Edinburgh for a few years, and afterwards left to fill an appointment as surgeon of the British Seamen's Hospital at Kronstadt, Russia. There he remained for twelve years. Returning to Edinburgh about twenty years since, he resumed general practice, and some years thereafter started in the High Street (afterwards removed to Drummond Street) what has developed into the Edinburgh Dispensary for Skin Diseases, Lauriston Place. The deceased gentleman, in addition to being a Fellow of the Royal College of Surgeons, was one of its examiners. He was the originator of the Edinburgh Goethe Society, and for many years its president.

WILLIAM STAINER, OF ENNIS.

We regret to have to announce the death of Dr. William Stainer, of Ennis, who died at the ripe age of ninety-four years. He was, we believe, the oldest medical practitioner, having been qualified as a L.A.H. in 1833. He lived to see five reigns—George III., George IV., William IV., Victoria, and Edward VII. When he commenced practice surgical anæsthesia was unknown, the stethoscope was just beginning to grow into favour, clinical thermometers were non-existent, and Currie's papers unread. Aseptic surgery was unthought of, and laudable pus was welcomed as a harbinger of life. The Broussian theory still dominated medicine, and the surgeon's chief reliance was on his lancet. Itinerant phlebotomists travelled the country bleeding man, woman, and child. Cuppers and phlebotomists were specialists, and leeches were one of the most expensive items in the hospital bill. The hard-worked dispensary medical officer had not come on the scene, and the poor were dependent on the charity of the generous rich, who provided dispensaries, and the free unstinted charity of the physician of the day. What a change! It is almost impossible to think of medicine struggling with disease unaided by the microscope, the Röntgen Rays, anæsthetics, antiseptics, and the clinical thermometer. Yet, without one of these, Dr. Stainer as a young man commenced practice. Not until 1855 did he seek further medical qualification, and he then became a L.F.P.S Glasgow. In the intervening years he had gradually won the confidence of his fellow towns-men and had become their trusted physician. During the remaining years of his life he more and more won their respect and held the place of both friend and physician, until full of honours and justly esteemed, he died with his strong intellectual powers unimpaired, mourned as a kind and courteous friend and as an experienced and skilful medical adviser. His death breaks the last link between the present generation of medical practitioners and those who so bravely and ably combated disease unaided by the scientific armamentarium of to-day.

MR. JOSEPH HARPER, L.R.C.P., M.R.C.S., J.P.

By the death of Mr. Joseph Harper, of Barnstaple, North Devon loses a skilful and highly-respected practitioner, and Barnstaple a man who for many years identified himself with the interests of this ancient borough, having several times occupied the position of Mayor.

Mr. Harper, whose burly frame and genial personality were familiar to every inhabitant for miles around, qualified in 1861, and went to Barnstaple soon after. He was Consulting Surgeon to the North Devon Infirmary, Medical Officer of Health to the Rural District Council, and President of Municipal Charities. Until recently he was Surgeon-Colonel to the 4th V.B.D.R.

Mr. Harper married the daughter of Captain Robinson, R.N., of Braunton. Mrs. Harper was killed about four years ago—the result of a trap accident while driving with her husband. He leaves several children, Two of the sons at least—Dr. John Harper, who practises at Barnstaple, and Mr. Charles Harper, who holds a colonial appointment on the West Coast of Africa—are well-known in the West of England on account of their brilliant play in the football field Another son, Dr. Walter Harper, is in practice at Braunton.

It is worth recalling that deceased once received a blackmailing letter from Neil Cream, the notorious criminal, and that he was instrumental in bringing him to justice.

NEW POCKET SURGICAL CASES.

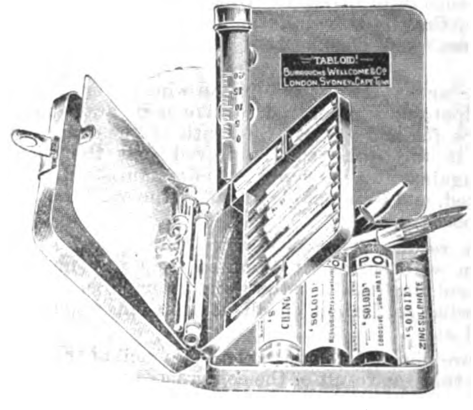
A Hypodermic "Article de Luxe."

A pocket hypodermic case which may fairly lay claim to manifest intrinsic superiority has been inspected by a trustworthy representative at the City offices of Messrs. Burroughs Wellcome and Co. It is not the sort of article to be distributed broadcast to the profession, sample wise, but it is admirably adapted for presentation—as "a small token of affection and esteem"—by a grateful patient or his friends The object in question, so far as the case and metallic fittings go, is of solid gold, the exterior thereof being—to borrow a phrase—exquisitely wrought. Its contents comprise a gold syringe with detachable finger grip, two gold-mounted platino-iridium needles, with the usual provision of accessories and hypodermic products. One's envious admiration for such a costly "art case" is tempered by the reflection that its possession would add another anxiety to existence.

BURROUGHS WELLCOME & CO
SOLOID

Hypodermic and Ophthalmic Pocket Case.

There really seems to be no limit to the ingenuity of designers in the direction of reducing the size of these indispensable pocket cases. The earlier cases of the kind were only "pocket" cases in the sense that, with patience, they could be insinuated into the pocket of an overcoat, but, passing through several intermediate stages, they culminate in the "Tabloid Hypodermic and Ophthalmic Combination Pocket Case," a specimen whereof has been submitted to us by Messrs. Burroughs Wellcome and Co. It only measures 3 × 3 × 1 in., so that it might be carried in the waistcoat pocket. Being made entirely of nickel-plated metal it can be kept perfectly aseptic, and it certainly ranks high for compactness and portability. The completely fitted case contains nine tubes of "tabloid" hypodermic products, nine tubes of "tabloid" ophthalmic products, four tubes of "soloid" antiseptic products, together with their patent hypodermic syringe, with finger-grip, two steel needles, one exploring needle, one gold lachrymal needle, pestle and mortar, two camel-hair brushes' one dropper and a vulcanite rod. If preferred, the B. W. & Co. All-Glass Aseptic Syringe will also fit this case. As will be seen, the case is an emergency equipment in itself, and its finish approaches perfection.



Literature.

GRANT ON THE FACE, MOUTH, AND JAWS. (a)

We do not believe that books of the kind before us are in demand among dental students either in this country or the United States; and we do not attempt to account for the fact that the author—an experienced teacher—should have wasted his time in compiling this volume. For the student who proposes to confine himself to the practice of dentistry, and who is preparing for a dental examination, it is much better to gain his surgical knowledge from an ordinary work on general surgery. There he gets full information on the principles of surgery and pathology, and he can easily pick out the special subjects—diseases of the mouth and jaws—with which he should be especially acquainted. There is a vast amount in the book before us, ranging from "Hydrophobia," "Epilepsy," and "Apoplexy" to "Malignant Lymphoma," and a whole series of morbid growths which occur about the face and jaws, that have no relation whatever to the practice of dental surgery, and that are never brought under the notice or care of the dental practitioner in the pursuit of his specialty. On the other hand, such subjects as neuralgia of the face and empyema of the antrum, of constant concern to the dentist, are too briefly dealt with to be of adequate use to the student; whilst all through the attempt to b concise leads to much obscurity, owing to the author's apparent lack of literary skill, or want of sufficient care in giving the quality of objectivity to his writings. The book contains a large number of illustrations, but of these a small proportion only can be of any use to the dental reader.

(a) "A Text-book of Surgical Principles and Surgical Diseases of the Face, Mouth, and Jaws, for Dental Students." By H. Horace Grant, A.M., M.D., Professor of Surgery and of Clinical Surgery in Hospital College of Medicine, &c. Illustrated. Philadelphia and London: W. B. Saunders and Company. 1902.

Medical News.

The Strike of Pharmacists in Galicia.

The chemists' assistants who struck for shorter hours and better pay have carried the day, the masters having given way. This is, no doubt, due to the fact that pharmacy in this country is a close preserve, and that there were no potential "blacklegs" to assist the masters in holding out They are compelled by the terms of their license to carry on the work, and this was almost impossible when single-handed. On the other hand it must be admitted that there was ample margin for improvement, the assistant pharmacists being expected to work almost continuously for small pay.

Arsenic or No Arsenic?

A brewer was charged at Stourbridge the other day with selling beer containing arsenic, the analysis having been made by the County Analyst for Warwickshire. The Staffordshire County Analyst, on the other hand, failed to discover any arsenic in the sample, and his result has since been confirmed by the Government Analyst. The charge was therefore dismissed, with £26 costs against the prosecutors.

A Futile Inquest.

An example of how not to conduct an inquest was set by the coroner's jury at Bilston last week when inquiring into the death of an infant. Two practitioners had seen the child, and both refused to certify the death, one of them referring the parents to the police. In spite of this fact a verdict of "natural causes" was arrived at apparently without either doctors being called upon to give evidence or without, under the circumstances, the indispensable formality of an inquest.

Medical Congress at Cairo.

The first Egyptian Medical Congress was opened by the Khedive, at Cairo, on Friday last, in the presence of several hundred representatives of, and delegates from the profession all over the world. The object of the Congress is to study the diseases of hot climates, and a number of important contributions are to be presented. The situation of Cairo lends itself admirably to the social side of such a meeting, and various attractive functions have been organised.

The New Buildings of the Adelaide Hospital.

His Excellency the Lord Lieutenant opened last week the new Operating Theatre, Nurses' Home, and Dispensaries connected with the Adelaide Hospital, Dublin. The operating theatre has cost £3,500, and will compare more than favourably as to its suitability, efficiency, equipment, or beauty with that of any hospital in the United Kingdom. It is in every way up to date, and worthy of the traditions of the Adelaide Hospital and of the scientific skill and ability of the members of the noble profession who will use it in the exercise of their duties. The Nurses' Home, which His Excellency had also been asked to open, supplies a want which has been much felt of late years, as the old "Home" accommodation had become utterly inadequate. In the same wing, on the ground floor, a new dispensary has been constructed and is now opened for the outdoor patient department. This dispensary was contemplated as far back as 1887, and a considerable sum towards it had been raised that year as a memorial of her late Majesty's Diamond Jubilee. The chairman announced that the committee had obtained the sanction of her Gracious Majesty Queen Alexandra to use her name in connection with the new Nurses' Home, and that it would be named by His Excellency that day, and known for the future as "The Alexandra Memorial Home." His Excellency, in the course of a speech, referred to the late illness of the Countess of Dudley, and to his gratitude to her medical advisers for their skilful assistance. He then declared the new buildings open. The proceedings terminated with a vote of thanks to His Excellency.

Death Under Chloroform.

A publican at Bury died last week from chloroform, administered for the purpose of an operation on the larynx. The usual verdict was returned.

Prosecution for Non-Notification of Typhoid Fever.

Dr. G, W. T. Clarke, of Uxbridge, was prosecuted last week for having failed to notify a case of typhoid fever. Dr. Clarke stated that he had sent the certificate by post as soon as he had made the diagnosis, but it transpired that the certificate did not reach the medical officer of health until a month later. The envelope bore the later date, and it was suggested that it had in some way been delayed in transit. The Bench, however, pointed out that the responsibility of delivering the notification lay with the defendant, and imposed a fine of £1 with £3 3s. costs.

Dispensing Fatalities.

Several dispensing fatalities have been reported from various parts of the country during the last few days. Among them we may note the death of a farmer at Surfleet from the effects of strong solution of ammonia dispensed in error for acetate of ammonia, and that of a young lady at Edinburgh from the effects of strychnine dispensed for phenacetin in a headache powder.

Pass Lists.

Society of Apothecaries of London.

During the December examinations the following candidates passed in:—

Surgery: J. E. L. Bates (Sections I. and II.), V. E. M. Bennett (Section I.), A. N. Collier (Section I.), D. Cotes-Preedy (Section I.), W. B. Harris (Section II.), J. Hunter (Sections I. and II.), E. Knight (Section I.), M. L. Pethick (Sections I. and II.), L. C. A. Savatard (Sections I. and II), G. B. S. Soper (Section II.).

Medicine: V. E. M. Bennett (Sections I. and II.), J. C. O. Bradbury (Sections I. and II,), W. C. P. Bremner, L. Courtauld (Sections I. and II.), E. H. Griffin (Sections I. and II), J. D. Keir (Section I.), E. Knight (Sections I. and II.), G. B. S. Soper (Section I.), J. A. W. Webster (Sections I. and II.), G. Wilmorsdoeffer (Section I.).

Forensic Medicine: V. E. M. Bennett, J. C. O. Bradbury, E. H. Griffin, E. Knight, M. L. Pethick, H. S. Tumber, J. A. W. Webster, G. Wilmersdoeffer.

Midwifery: J. E. L. Bates, V. E. M. Bennett, W. E. Denniston, R. S. Dollard, A. C. George, E. H. Griffin, O Gutermann, E. Knight, W. Martin, H. G. Peel, M. L. Pethick, L. S. Shoosmith, G. Wilmersdoeffer. The L.S.A. diploma of the Society was granted to the following candidates, entitling them to practise medicine, surgery, and midwifery:—E. H. Griffin, J. Hunter, and J. A. W. Webster.

Trinity College, Dublin.

The following candidates were successful at the Michaelmas Examinations in Public Health:—

Diploma in Public Health, Part I: Carter, James E., M.B., B.Ch., B.A.O.; Kennan, Richard H., M.D.

Part 2: Carter, James E., M.B., B.Ch., B.A.O.; Kennan, Richard H., M.D.

Notices to Correspondents, Short Letters, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature* or *initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

Contributors are kindly requested to send their communications if resident in England or the Colonies, to the Editor at the London office; if resident in Ireland to the Dublin office, in order to save time in re-forwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Original Articles or Letters intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this journal can be had at a reduced rate providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Mrs. B.—The prices charged in nursing homes vary. Some are as low as three guineas a week, but the majority are much more. Included in the charges are board and lodging and nursing attendance: medicines, dressings, special foods, &c., are usually extra.

Dr. Laloir.—There is, in our opinion, no ambiguity in the bond. It may press hardly upon our correspondent, but if he be wise he will accept the situation.

Lupis Divinus.—Our correspondent has been ill-advised. The matter should now be allowed to drop.

Country Member.—The ideal qualification for a London coroner is that he shall be a medical man who has been called to the Bar. If to these qualifications it be added that he has served the office of deputy-coroner in one of the Metropolitan districts, his claims for promotion to a full coronership are very heavy; almost without exception the present London coroners have been deputies.

CLIPPINGS FROM LAY EXCHANGES.

The Association Sets.

"Dr. C—— left for Omaha Tuesday to attend the State Medical Association which sets the sixth, seventh, and eighth. As president of one section he is billed for a paper on gyneacology and absteterics. The Dr. takes great pleasure in such gatherings."—*Albion* (Neb.) *Argus*.

Dr. R. W. L.—Egg lemonade is a nutritive and refreshing drink for febrile patients. It is prepared in the following manner:—Take two lemons, peel them twice, discarding the white layer and using only the yellow rind. They are sliced and placed with the yellow rind and a little sugar in a jug, and a pint of boiling water is poured thereon and allowed to cool, occasionally stirring. When it has cooled to about 100° F. insert an egg-whisk and gradually pour in the white of an egg, whisking vigorously all the time; strain through muslin while still hot, and serve cold.

DOCTORS OF OPTICS.

According to *American Medicine* the diploma of doctor of optics, price thirty shillings, is being hawked round in the United States. "No questions asked." The use of the ophthalmoscope and retinoscope and the ability to diagnose and treat all errors of refraction is taught by correspondence without extra charge. British optical papers please copy. Our correspondent suggests that the London Spectacle Makers Company might be willing to take a job lot of the diplomas for distribution among its *alumni*.

CONSUMPTION IN GERMANY.

In no country in Europe has the fight against consumption been waged with so much persistence and success as in Germany. The following table shows the decline in the death statistics from consumption since 1876, the year in which accurate statistics were first compiled. The number of deaths refer to ten thousands of population:—

	1876	1901
Crefeld	62	37
Breslau	61	38
Danzic	35	16
Aachen	21	12
Elberfeld	164	53
Charlottenburg	25	19

Here are six representative cities scattered throughout the Empire, and the statistics show at a glance the immense progress which has been effected in twenty-five years.—*The Leisure Hour* for January, 1903.

Meetings of the Societies, &c.

LONDON.

Saturday, December 27th.

Royal Institution of Great Britain (Albemarle Street, W.).—3 p.m. Prof. H. S. Hele-Shaw: On Locomotion, on the Earth, through the Water, in the Air. (Christmas Lectures adapted for Young People.)

Appointments.

Austen, Harold, M.D., B.S.Lond., M.R.C.S., L.D.S., Assistant Dental Surgeon to St. Bartholomew's Hospital.

Child, Herbert, M.R.C.S., L.S.A.Lond., Surgeon to the Department for Diseases of the Throat, Nose, and Ear, Reading Dispensary.

Hamilton, Geo. G., M.B., F.R.C.S.Eng. & Edin., Honorary Surgeon to the Liverpool Royal Infirmary.

Mackenzie, Dudley M., M.B., Ch.B.Aberd., Junior Resident Medical Officer to the Croydon General Hospital.

Nuttall, Alex. W., F.R.C.S.Eng., Surgeon to Out-patients to the Queen's Hospital, Birmingham.

Pegler, L. Hemington, M.D.Edin., M.R.C.S., Honorary Surgeon for Diseases of the Ear, Nose and Throat to the Clergy Orphan Corporation School for Girls, St. Margaret's School, Bushey, Herts.

Phillips, Hugh R., M.D.Edin., Second Anæsthetist to the Italian Hospital, Queen's Square.

Roberts, H. M., L.R.C.P. & S. Edin., L.F.P.S.Glasg., Medical Officer for the Parish of Stevenston, Landward Portion.

Robinson, J. F., F.R.C.S.Eng., L.R.C.P.Lond., Senior Resident Medical Officer to the Croydon General Hospital.

Vacancies.

Birkenhead Borough Hospital.—Senior Resident Male House Surgeon. Salary £100 per annum, with board. Applications to Chairman, Weekly Board.

Bridgwater Infirmary.—House Surgeon. Salary £80 a year, with board and residence. Applications to Mr. Edward Trevor, Honorary Secretary, Bank Chambers, Bridgwater.

Brecon and Radnor Asylum, Talgarth, R.S.O.—Assistant Medical Officer. Salary £140 per annum, with furnished apartments, board, attendance, and laundry. Applications to the Medical Superintendent.

Cahirciveen Union.—Dispensary Medical Officer. Salary £150 per annum, and £15 a year as Medical Officer of Health, together with the usual Vaccination Fees. Immediate applications to T. C. Fitzgerald, Clerk of Union. (See Advt.)

Carlow Union.—Assistant Nurse. Salary £20 per annum. Applications to the Presiding Chairman by the 2nd prox. (See Advt.)

Carmarthenshire Infirmary. Resident Medical Officer. Salary £100 per annum, with furnished apartments, board, attendance, fire, gas, and washing. Applications to Howell Howell, Secretary.

Essex and Colchester Hospital.—House Surgeon. Salary £100 per annum, with board, washing, and residence in the Hospital. Applications to C. L. Becher, Secretary.

Great Yarmouth Hospital.—House Surgeon. Salary £90 per annum, with board, lodging, and washing. Applications to Richard F. E. Ferrier, Hon. Secretary, 33, Hall Plain, Great Yarmouth.

Lancashire County Asylum, Winwick, Warrington.—Assistant Medical Officer. Salary commences at £150 per annum, with furnished apartments, board, attendance, and washing. Applications immediately to the Medical Superintendent.

North Staffordshire Infirmary and Eye Hospital, Hartshill, Stoke-upon-Trent.—House Surgeon. Salary £120 per annum, with furnished apartments, board, and washing. Applications to the Secretary and House Governor.

Nottingham General Hospital.—Assistant House Surgeon. Salary £100, with board, lodging, and washing in the Hospital. Applications to the Secretary.

Notts County Asylum, Radcliffe-on-Trent.—Assistant Medical Officer. Salary £130. Applications to the Medical Superintendent.

Palmer Memorial Hospital, Jarrow-on-Tyne. House Surgeon. Salary £120 per annum, with board and residence. Applications to the Secretary.

Sir Patrick Dun's Hospital.—Assistant Surgeon. Immediate application to the Secretary, Dublin. (See Advt.)

The Cancer Hospital (Free), Fulham Road, S.W.—Junior House Surgeon. Salary £70 per annum, with board and residence. Applications to Fred. W. Howell, Secretary.

Watford Joint Hospital Board.—Matron. Salary £100 per annum, with board and residence. Applications to the office of the Board, Watford Place, Watford.

Birth.

Slaughter.—On Dec. 17th, at 76, Brondesbury Road, N.W., the wife of E. A. Slaughter, M.R.C.S., of a son.

Marriages.

Hale—Wadd.—On Dec. 17th, at St. Matthias' Church, Richmond Hill, Major G. E. Hale, D.S.O., R.A.M.C., to Kathleen, youngest daughter of Dr. Wadd, of Richmond Hill, Surrey.

Hanley—Shelley.—On Dec. 18th, at St. Thomas's Church, Dudley, Worcestershire, Richard George Hanley, M.B., Major Royal Army Medical Corps, to Grace Lilian, daughter of the late Rowland Shelley, Esq.

Malcolm—Topham.—On Dec. 17th, at the Church of St. John Baptist, Penzance, John D. Malcolm, F.R.C.S.Ed., of 13, Portman Street, London, W., to Frances Sophia, widow of Edward C. Topham, of Kilkhampton, N. Cornwall.

Panting—Hepburn.—On Dec. 17th, at St. Mary's Church, Aldridge, Laurence Christopher Panting, M.D., M.A.Oxon, of Truro, to Jane Agnes (Nina), younger daughter of the late Archibald Hepburn, Esq., and Mrs. Hepburn, of The Moot House, Aldridge.

Phillips—Heron-Watson.—On Dec. 18th, at St. Andrew's Church, Drumsheugh Gardens, Edinburgh, Robert Walter Douglas Phillips, The Cottage, Chelford, Chester, to Isabella Edith (Ida), younger daughter of Patrick Heron-Watson, M.D., LL.D., F.R.C.S., Honorary Surgeon to the King in Scotland.

Stone—Sinclair.—On Dec. 17th, at St. Jude's Church, South Kensington, Major Charles A. Stone, eldest son of Mr. W. A. Stone, late R.N., to Edith Annie, only daughter of Surgeon-General and Mrs. E. M. Sinclair, of 33, Nevern Square, S.W.

Deaths.

Boreham.—On Dec. 14th, at his residence, Elm Bank, Teignmouth, William Godman Boreham, M.D., aged 53 years.

England.—On Dec. 16th, at West Hayes, Winchester, William England, M.D., F.R.C.S., aged 79 years.

The Medical Press and Circular.

"SALUS POPULI SUPREMA LEX."

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Vol. CXXV. WEDNESDAY, DECEMBER 31, 1902. No. 27

Paris Clinical Lectures.

THE HEART IN ACUTE ARTICULAR RHEUMATISM.

By Dr. ERNEST BARIE,
Physician to the Laennec Hospital.

[SPECIALLY TRANSLATED FOR THE MEDICAL PRESS AND CIRCULAR.]

In his "Clinical Treatise on Acute Articular Rheumatism, and the Law of Coincidence of Inflammations of the Heart with this Disease," published in 1840, Bouillaud, discussing afresh the relationship between affections of the heart and acute articular rheumatism, a view which he has maintained since 1836, described the intimate connection between these two conditions in two short and rigidly-defined laws.

1. In acute, violent, general articular rheumatism the coincidence of endocarditis, pericarditis, or endo-pericarditis is the rule, the non-coincidence being the exception.

2 In acute articular rheumatism of the moderate, partial, and apyretic type, the non-coincidence of endocarditis, pericarditis, or endo-pericarditis, is the rule and their coincidence the exception.

These two laws remain, on the whole, unattackable in their general significance, but the terms are too absolute and too rigid; for if we were to insist on this, it would be easy to show that the subacute forms of articular rheumatism are but too often complicated by organic affections of the heart.

Be this as it may, the narrow relationship which exists between endo-pericarditis and acute articular rheumatism is at the present time unanimously admitted by all clinical observers; but, on the contrary, in chronic rheumatism, the problem becomes singularly involved, and deserves to be closely studied Let us first see what various observers say with regard to this subject.

In an important paper, the *résumé* of a contribution read before the Biological Society, M. Cornil in nine cases of chronic articular rheumatism, followed by post-mortem examination, found signs of pericarditis four times -twice it was acute pericarditis which had developed during the attack of rheumatism, and twice pericarditis of old standing, which had given rise to extensive adhesions accompanied by obliteration of the pericardial sac, complete in one case, partial in the other. These very remarkable observations, which were collected at the Salpetrière Hospital, in Charcot's wards, are worthy of our attention.

The first case of acute pericarditis occurred in a woman, æt. 66, in whom rheumatic arthritis was complicated by an enormous abscess in the leg, which caused her death. At the post-mortem examination hæmorrhagic pericarditis was discovered; the pericardium was filled with a sanious liquid, containing fatty globules. The two surfaces of the serous membrane were covered by fibrinous pseudo-membranes, non-adhesive and recent. The heart was big and its muscular fibres were of a yellow colour; it contained black fluid blood.

The second case is particularly interesting. It was that of a woman, æt. 29. who had been suffering from chronic articular rheumatism ever since she was twelve years of age. In this case the pericarditis supervened suddenly with a rigor of violent præcardiac pain and well-marked dyspnœa. The cardiac area was the seat of tumultuous pulsations; at the base there was a creaking sound like that of new leather with both sounds, and at the apex a systolic murmur. Later on, in spite of repeated wet cuppings over the præcardiac area and the administration of digitalis, the patient complained of great pain in the region of the apex, indeed the pain was such that she was unable to lie on her back, and was obliged to sit up in order to breathe. On auscultation the pathological noises disappeared little by little, but it was observed that the two ordinary sounds of the heart were dull and far apart. After a temporary improvement lasting a month the patient was again admitted to the infirmary. At this stage the cardiac beats were very tumultuous and arhythmic, and the whole præcardiac area was absolutely dull on percussion. This serious condition was further complicated by pleurisy, intense prostration and convulsions which culminated in death. At the post-mortem the pericardium was found to be enormously distended, and to contain a considerable quantity of blood-stained liquid; its two surfaces were covered by a villous exudation, which histological examination showed to be vascularised neo-membranes. The heart was large and soft, its cavities were dilated, but the orifices were not damaged. The ventricular walls, thin and softened were of a yellow colour Under the microscope the original fibres were seen to be granular, and had partly lost their striation; these granulations involved the muscular fibres themselves, were of a yellow colour and composed of fat In other words, there existed a hæmorrhagic pericarditis accompanied by fatty degeneration of the myocardium complicated by pleurisy and albuminous nephritis.

The two cases of chronic pericarditis can be related in a few words: in both patients the aorta was atheromatous, and in one case the aortic lesion involved its origin as well as the aortic valves. These lesions entailed aortic insufficiency. In both cases, indeed, hypertrophy of the left ventricle and fatty degeneration of the myocardium was noted as the result of the pericarditis.

The connection between chronic articular rheumatism and diseases of the heart is established by numerous and well-authenticated observations. As regards their frequency, these cardiac affections are certainly rare, and there is in this respect nothing that can be compared with what we observe in acute articular rheumatism This may explain why certain authors such as Vidal, Fuller, Durand-Fardel, Guéneau de Mussy, &c., who have studied the manifestations and clinical forms of chronic rheumatism very closely, do not even mention the existence of these affections of the heart. M. Lancereaux, establishing a parallel between acute articular rheumatism and chronic arthritis, recognises that, in the former, the danger lies in the frequency of the mitral lesions; while in the latter, what one has to fear is arterio-sclerosis, so frequently met with in these patients, associated or not with lesions of the aortic orifice. Professor Jaccoud had long before expressed the same opinion, viz., that affections of the heart do not often occur in connection with chronic arthritis. "We do not," he says, "meet so much with valvular lesions; it is pericarditis, and arterial atheroma, with its consequent lesion, hypertrophy of the heart." He clearly recognises, nevertheless, the comparative frequency of pericarditis.

Charcot appears to have been one of the first (from 1863) to recognise the comparative frequency of organic affections of the heart in chronic articular rheumatism. In a paper, published in 1867, he insisted on the fact that endocarditis and pericarditis unquestionably occurred in a certain proportion of cases of chronic articular rheumatism; that these affections were of a similar character to those met with in acute rheumatism, and they develop in preference, during the acute outbreaks of the affection which approximate in a certain degree the acute stage. Having made this last statement, which has become classic, he adds this very important fact to the effect that he has collected a large enough number of observations in which endocarditis developed in the course of chronic rheumatism without this affection having ever passed through an acute stage.

Be this as it may, and without discussing for the time being the pathogenesis of these affections of the heart, we must mention that they have most frequently been observed in female subjects, a fact which will not cause surprise if we bear in mind that chronic arthritis is specially frequent in women. Men, however, are not as free from it as we might at first imagine; for out of twenty-three observations of heart lesions there are twenty in which the sex is indicated—fifteen women and five (that is 25 per cent.) men.

Chronic articular rheumatism accompanied by an affection of the heart occurs at all ages, although it more frequently attacks the aged—sixty years (Charcot), seventy-one years (Mauriac), seventy-eight years (Charpentier), eighty-four years (Charcot, Ball), &c. It is also met with during adolescence—ten years (Barthez), sixteen years (Dally), seventeen years (Cornil), and even in very young children (Stoicesco, Charon).

All affections of the heart are not met with in connection with chronic arthritis deformans. According to Jaccoud and Charcot, pericarditis is met with more frequently, and this opinion is generally admitted; but from the cases we have just been studying it will be seen that endocarditis is fully as frequent. Next come the following affections, which are generally associated with the preceding complaints, hypertrophy of the heart, degenerative changes in the myocardium (fatty degeneration, hypertrophy), and lastly, cardio-sclerosis.

Pericarditis is sometimes dry (Barthez, Mauriac), sometimes accompanied by effusion; in the former case, all varieties are met with, from the simple soft, fibrinous pseudo-membranes, sometimes very extensive but easily detached (Ball), to the extensive thick adhesions of the two layers, with complete obliteration of the pericardium (Cornil), that is to say, the most complete type of cardiac symphysis. Pericarditis with effusion seems to have a predilection for the hæmorrhagic form; in the case recorded by Charpentier it simply took the form of a blood-stained serous liquid, filtering through the network of exudation; but in Cornil's two cases there appears to have been a genuine effusion of blood.

Endocarditis involved the mitral valve four times only, and among these cases I remember a very curious one reported by Charon, that of a little girl, æt 4, in whom the endocarditis was both parietal and valvular. Aortic lesions are more frequent (seven cases); and with one exception the lesion met with was aortic insufficiency. The patients suffering from this lesion are either adults or old people, but young subjects, and even adolescents are not altogether free from it, since the patient observed by Ollivier was twenty three years of age, and the case related by Dally was a lad of sixteen.

I will not discuss the other cardiac changes—hypertrophy, dilatation, fatty degeneration, polysarcia, &c.—these lesions being usually associated with those of the endocardium and pericardium. I will not dwell any longer on the symptoms or evolution of these different affections of the heart; they all end, after a variable period, in functional failure of the myocardium or asystole. I now arrive at the most recondite part of this problem, viz., the pathogenesis of these affections of the heart in chronic articular rheumatism.

No comparison can be made with acute articular rheumatism. We know, indeed, that the microbial origin of the latter is gradually gaining in probability in spite of the negative researches of Sänger and of Weichselbaum, which are, moreover, contradicted by the positive results of Acholme, Lucatello, Triboulet, Thiroloix, Pic, Lesieur, &c. Doubtless the morphology and biological characters of this microbe are still unknown, but its influence on the prevention of endocarditis is none the less extremely probable; no such factor can be invoked in the case of arthritis deformans. By close study of patients suffering from this last complaint, we can divide them into three distinct groups:—

In the first, the cardiac affections of old standing appear to walk hand in hand with chronic rheumatism, but without any direct connection therewith, for we find in the antecedents of the patient evidence of pathological influences such as typhoid fever, syphilis, &c., to which we may attribute the cardio-sclerotic affections—scarlet fever may also stand in causal relationship with erysipelas, diphtheria, puerperal fever, &c.

In the subjects of the second group it is clear from a study of the evolution of the cardiac affection that it commenced during an acute or subacute rheumatic attack, which had complicated the chronic arthritis. This being the case, these come under the law formulated by Bouillaud, and it is by this pathogenesis that the majority of authors incline to explain the coexistence of affections of the heart and chronic articular rheumatism.

Lastly, in the third category there occur the much rarer cases in which the arthritis deformans appears as such from the first, without being preceded or giving rise during its evolution to any acute or subacute manifestation. Such are, for instance, the cases mentioned by Beau and Charcot, such, also, is the case of our patient in the Tenon Hospital, and of the woman who is at the present time under our care. The interpretation to be placed on the cases comprised in this third group is by no means certain, and we must make a further subdivision. Many of these patients are, as a matter of fact, either aged, markedly atheromatous, or middle-aged people with all the symptoms of premature arterio-sclerosis. In all of them the cardiac lesions are, as a rule, complex—cardio-sclerosis, dilatation of the heart, aortic lesions, and sometimes lesions of the coronary arteries with induration of the temporal and radial arteries, &c. These cardio-vascular changes are all part and parcel of the general process of arterio-sclerosis, and chronic rheumatism has played no appreciable pathogenic *role* in the production of the cardiac affection. In other patients, large eaters, alcoholic, or obese, we must bear in mind the deleterious action of alcohol in order to explain the degeneration of the myocardium and fatty surcharge of the heart which is seen at the post-mortem examination of so many of those who have suffered from deforming chronic polyarthritis.

There still remains one group of patients who do not come under any of these heads, who are neither old nor suffering from arterio sclerosis, and to whom what we have just said does not apply; such are, for example, adolescents and young children, who are far from being immune from attacks of chronic arthritis, as you are aware.

The difficulty of interpreting such cases is more so since we are far from certain of the exact nature of chronic articular rheumatism. Admitting that acute articular rheumatism can, under certain conditions, leave more or less permanent traces of its passage, it is at the present time generally recognised that acute rheumatic arthritis differs entirely in its nature from chronic articular rheumatism, which appears to have usurped the name of rheumatism. As a matter of fact its relationship to acute articular rheumatism is always very obscure.

As to its intimate nature it appears that we must attribute chronic arthritis to two distinct factors.

Struck by the resemblance between amyotrophies following chronic rheumatism, and the muscular atrophies of nervous origin, M. Debove remarks that the articular and muscular lesions of chronic rheumatism might well be ascribed to changes in the central nervous and peripheral nervous systems. It is with the same thing in view that Dr. Lancereaux says: "The lesions of chronic rheumatism bear the closest resemblance to those we sometimes meet with in locomotor ataxy, general paralysis, certain affections of the spinal cord and nervous cords; they are certainly due, at their starting point, to some disturbance of trophic innervation."

However, if this point of view is not admitted—since pathological anatomy does not establish it, but which I know to be a fact—we are obliged to regard chronic rheumatism as one of those complaints due to a slowing down of nutrition, and this idea is the more plausible since two of these affections may, like chronic arthritis, be complicated by cardiac lesions—gout and diabetes for instance. The former, like rheumatism, is accompanied by chronic degeneration of the myocardium, sometimes by valvular endocarditis (Lobstein, Coupland), and even by pericarditis with effusion (Trousseau). In diabetes also, the heart is often changed, according to Saundby, in the proportion of 60 per cent. Thus in deforming chronic arthritis we meet with fatty degeneration, hypertrophy of the heart, cardio-sclerosis, and lastly, but more rarely, valvular endocarditis, of which M. Lécorché observed fourteen cases (ten in women and four in men).

Thus these two disturbances of nutrition display in common this liability to the same acute affections of the heart, and these—it is logical to suppose—are due to the effect on the circulatory apparatus of the fundamental dyscrasiæ. But though these dyscrasiæ have for a long time been recognised with regard to gout and diabetes (uricæmia, hyperglycæmia) in connection with chronic rheumatism, on the contrary, we have not up to the present time obtained any precise data. I am aware that a case related by Böcker, and referred to by Charcot, is often quoted; that of a patient suffering from chronic rheumatism, in whose urine was discovered a marked diminution in the normal proportion of phosphate of lime. While in the blood this salt was four times more abundant than normal. As is always the case, uric acid was not present in the blood. In spite of this interesting case, we must bear in mind that hæmatology and the study of secretions in chronic rheumatic polyarthritis have up to the present time given very unsatisfactory results. This uncertainty does not, however, justify us in abandoning the theory which we have just enunciated, and which above all others appears plausible and likely to throw light upon the coincidence between cases of chronic articular rheumatism and organic affections of the heart.

THE ETIOLOGY OF TUBERCULOUS PERITONITIS. (a)

By EDMUND CAUTLEY M.D., Cantab, &c.,

Physician to the Belgrave Hospital for Children, &c.

On the grounds of scientific precision all forms of inflammation of the peritoneum due to the tubercle bacillus should be included under the name of "Tuberculous Peritonitis."

Preference is sometimes given to the name "Tuberculosis of the Peritoneum," for peritonitis suggests that the essential feature is an inflammation, whereas the tuberculous infection is the great characteristic. Both the clinical signs and symptoms are rarely those which we are accustomed to associate with a diagnosis of peritonitis. In one variety, the most common one in children, the peritoneum may be studded with grey tubercles without the spread of inflammatory changes from the tubercles to the peritoneum. This we may omit from the discussion as being part of a general blood infection, an acute miliary tuberculosis. Death usually takes place before the onset of any definite abdominal symptoms. Should the illness be more prolonged the grey tubercles may undergo caseous degeneration and there may result a certain amount of peritonitis and exudation. Strictly speaking, the process, even in the earliest stages, is an inflammatory one, for a tubercle results from inflammatory changes initiated by the irritation of the tubercle bacillus. Omitting this variety we have three more or less distinctive types of the disease, any one of which may be either localised or generalised. This classification I suggest as the most simple one for the purposes of a discussion.

1. Adhesive peritonitis.
2. Peritonitis with effusion of (*a*) serum, (*b*) pus.
3. Caseous or ulcerative peritonitis.

From the etiological point of view no such distinction is necessary, and my remarks will apply to every form of tuberculous infection of the peritoneum. The etiology of the disease is that of tuberculosis generally, with the addition of a few special points indicating why the peritoneum is attacked.

Gentlemen, the child is the product of inheritance modified by environment. In the case of disease due to microbial infection we have the same idea expressed in another form when we speak of "the seed and the soil." The latter phrase does not quite cover the ground, for it omits special reference to the manures modifying the nature of the soil.

By the *soil* I mean the primary physical constitutional state of the subject dependent on inheritance.

By the *manures* I mean all those influences or modifications of the soil, the constitutional state, as a result of environment.

The *seed* is the tubercle bacillus, for that, and that only, can give rise to tuberculous disease.

Inheritance.—Like many of the beliefs of our ancestors, the belief in the inheritance of tuberculosis has been scoffed at and deemed of no account. On the other hand, it has undoubtedly received undue prominence as an etiological factor, and has caused much too gloomy a prognosis to be given in the case of children of tuberculous parentage. The term inheritance in this connection means one of two things:—

1. Either the disease is directly transmitted from parent to child through the medium of an infected germ cell or maternal blood supply.
2. Or the child inherits a certain peculiarity or delicacy of structure which renders it more susceptible to the particular disease.

Vague and indeterminate as the latter explanation sounds, it is probably true of the inheritance of disease. The physical strength and health of the child, and its power to resist disease, depend primarily on those of its ancestors. Whether the child of tuberculous ancestry is or is not more prone to develop tuberculosis is a moot point, which will be referred to subsequently.

Taking the case of the father first, it has been shown that the tubercle bacillus may exist in the semen, *e.g.*, in tuberculous disease of the vesiculæ seminales. It is almost inconceivable that the microscopic spermatozoon can actually contain the bacillus, even in spore form, and convey it to the ovum. Much more probably the infection of a sperm cell would impair its nutrition and render it useless for the purpose of impregnation.

Similarly, it is equally improbable that an infected ovum could be satisfactorily impregnated and carry out developmental processes. The bacillus has been actually found in the ovum in one instance by Baumgärten, who artificially fecundated a rabbit with tuberculous semen. But maternal inheritance stands upon a very different footing. For nine months or so of pre-natal existence the future child is in the closest of all possible contact with the mother. During the whole of this period it receives its blood supply from the mother, filtered, it is true, for the greater part of the time through the placenta. Yet even human filters are sometimes imperfect. Supposing the mother to be tuberculous, it is by no means improbable that the placenta may become affected. Its nutrition may be sufficiently impaired to permit the passage of the bacillus from the maternal blood to that of the fœtus. Or the placenta may be actually tuberculous. Gärtner, as the result of inoculating the mother, intra-peritoneally or intravenously, produced tuberculosis in young mice. A calf has been found tuberculous at birth. Bacilli have even been found in the human fœtus removed by Cæsarian section from a tuberculous mother. Many infants show such advanced tuberculosis of the lungs (and note that it is usually of the lungs) a few months after birth as to render fœtal infection a suggestive explanation. On the other hand, in most of these instances, the mother has given no evidence of tuberculosis, and there has often been a history of exposure to infection. Even if there be no tuberculosis in the mother, as in the case of a child of six months under my care, in whom extensive tuberculosis of the lungs was found, the probability of direct infection is enormous. In a case of Stiegenberger's, a babe died at five months from extensive tuberculosis. The parents were healthy, but the babe had been nursed by a tuberculous nurse.

(a) Opening a Discussion before the Society for the Study of Disease in Children, December 12, 1902.

In the bulk of supposed inherited cases of tuberculosis we shall find on careful investigation evidence of direct infection, rather than of infection through the medium of a germ cell or maternal blood supply. Inheritance of the disease is so rare as to be a negligible quantity, and the spread from parent to child is in very truth by direct infection.

The Soil.—On the primary constitutional state depends to a certain extent the susceptibility to tuberculosis. On certain unknown bio-chemical characteristics of the tissues depends the growth of the bacillus when once it has obtained an entrance. Of the latter conditions little is known beyond the fact that the bacillus does not grow in an acid medium. Consequently it is rare to find tuberculous disease of the stomach.

It is a moot question whether the children of a tuberculous parent are more liable than others to contract tuberculosis, apart from the risk of direct infection. Evidence has been brought forward by Squire and Maxon King in favour of the view that there is no such predisposition. It is sometimes even supposed that there is an acquired natural immunity, and in favour of this it must be borne in mind that such children are much more exposed to infection than others. The case incidence should be, therefore, much higher. According to Maxon King it is actually lower. The resistance to infection is only a question of degree, and is largely influenced, increased or decreased, by surrounding conditions. Probably all animals can be infected under suitable conditions as to dosage and surroundings. What is true of animals in this connection almost certainly applies equally to children.

The Seed.—According to Möller there are as many as nine acid-resisting bacilli which stain like the tubercle bacillus. Notable among these are the butter bacillus and the smegma bacillus. Care must be taken not to rely upon staining properties as proof that a suspicious bacillus is the tubercle bacillus. The most certain proof is that obtained by the intra-peritoneal inoculation of guinea-pigs.

From the moment of birth the child is liable to infection from many sources. Now I do not suffer from bacillophobia, but if there were no tubercle bacillus there would be no tuberculosis. Yet the bacillus need not be the terrible enemy some of us consider it. Granted that its ravages are great, it does not follow that we are going the best way to eradicate the disease by building sanatoria to keep alive those already infected, enabling them to propagate their species, even in sanatoria; or by passing bye-laws to prevent the homely habit of spitting or the custom of kissing those who are not clean-shaven. Surely this is not the ideal way of attacking a widely prevalent disease. The farmer who wishes to keep thistles out of his land does not set up wind screens to keep out the thistle down. Such an attempt would be as foolish as it would be unavailing. We can, perhaps, diminish to a slight extent the distribution of the tubercle bacillus but, like the farmer, we must devote our energies mainly to tilling the soil effectually, to increasing the resisting power of the individual until he can scoff, as many a healthy man now scoffs, at that arch-fiend the tubercle bacillus. If preventable, why not prevented? The man in the street is governed by phrases and this has caught his ear. How are we to answer him? Gentlemen, the future of the nation is in the hands of little children. The future of the nation is in the hands of our profession, for on us depends the health of the children. Let us increase their powers of resistance to infection and diminish the liability to exposure. If the constitution is sound and the environment as perfect as can be obtained in this imperfect world, then the bacillus becomes a comparatively harmless foe.

The Environment, or Manures.—On the other hand, the strength of the foe is increased by every factor which lowers the health of the child. If in addition there be inherited delicacy or weakness of constitution due to parental tuberculosis, syphilis, alcoholism or mere delicacy, the danger of bad environment is exaggerated. Everything which lowers the health of the child, such as impure air, lack of sunlight, close rooms, unsuitable or insufficient food, imperfect or badly applied clothing, and bad hygienic conditions generally, acts as a predisposing cause of tuberculous disease. So too local or general debility of the tissues may be due to local or general disease or injury and, by lowering the vital resistance, predispose to infection.

Under all these conditions the ubiquitous bacillus may find on entrance a suitable soil for its growth and development in the damaged area of impaired vitality.

But though the seed may enter, and does enter, it does not always acquire a holding and flourish. Sometimes it falls on stony ground. The soil is not always suitable. Thus, clinical evidence favours the view that the uric acid diathesis is resistant to tuberculous infection.

Mode of Infection.—The bacillus enters by the respiratory tract, the alimentary tract, or the cutaneous system. Infection through the skin is rare in adults and still more rare in children. We need not consider it. The aërial convection of tuberculosis has been proved by direct experiment in animals by diffusing dry powdered sputum in the hutches of rabbits. Probably this is the great source of infection in man. The possibility of such infection is great. It has been estimated by Böllinger that one cubic centimetre of sputum may contain a million bacilli. According to Nuttall, as many as 4,000,000,000 may be expectorated in the space of twenty-four hours. Fortunately most of them are dead bacilli. Still it is clear that the neighbourhood of a consumptive, who promiscuously spits about the floor, may be highly infectious. In coughing or speaking loudly bacilli may be mingled with the spray. If the patient uses handkerchiefs these, too, may convey the bacillus, and it may be spread by direct contact with the lips, &c. After puberty, the lungs are almost invariably found affected in cases of tuberculosis. In childhood we also find that either the lungs or some of the thoracic glands are almost always affected. In a paper read before this Society in November of last year on "The Ætiology and Morbid Anatomy of Tuberculous Meningitis" I brought forward evidence to show that the lungs or bronchial glands, or both, were almost invariably affected. In no less than twenty-three out of twenty-five cases, fully examined post-mortem, some one or more of the mediastinal glands were caseous. In the other two none of the glands appeared infected. In four the mesenteric glands were also involved. This evidence I took to be opposed to the view that infection takes place through the aliments. I expect that pathological evidence will be in favour of a similar proposition in the case of tuberculous peritonitis. It is rare for the disease to be limited to the abdominal cavity. On the other hand infection through the lungs is not the simple matter we might regard it, considering the laws of diffusion of gases, the filtering of air through the nose, the ciliary action of the cells lining the trachea, the results of experiments with the inhalation of heavy dust, and the differences in the localisation of the disease in the lungs of adults and children, it might be fairly urged that the bacilli do not reach the lungs through the inspired air, but through some other channel, such as the mucous membrane of the mouth, tonsils, pharynx, &c, *via* the lymphatics and glands of the neck.

Many regard the alimentary tract as the chief channel of entrance of the bacillus. This brings us to the question of tuberculous milk. That there is a good deal in the market is undoubted, though I think the prevalence of tuberculosis in cattle and of tuberculous disease of the udder is exaggerated. It is stated that no less than 30 per cent. of all cows are tuberculous, and that 3 per cent. have tuberculous disease of the udder. I do not believe it, and it is opposed to my experience. Opposed also is the view that tuberculous milk is the great source of infection, I should like to quote Professor Carlo Ruata, of Perugia, who maintains that the milk of tuberculous cows never produces tuberculosis in man; that in adult life primary intestinal tuberculosis does not occur; and that in the first years of life tabes mesenterica, as well as other forms of tuberculosis, are always inherited. Not many will, I think, support this statement in its entirety.

The question of the identity of the human with the bovine bacillus is still a matter of uncertainty, though on the whole the probabilities are strongly in favour of identity, modified by environment.

To the professorial mind of Koch a few experiments with negative results were sufficient justification for stating that the bacilli are different; that the human bacillus will not give rise to bovine tuberculosis; and that the bovine bacillus will not cause tuberculosis in the human subject. From this it is argued that tuberculous milk is harmless and this view is supported by asserting the infrequency of primary intestinal tuberculosis in infancy, and by the absence of wide-spread epidemics due to the milk of tuberculous cows. It is assumed that alimenta can only produce the disease by setting up a primary tuberculosis of the intestine. That such disease is rare is shown by the results of autopsies on tuberculous children. Biedert found primary intestinal disease is only 16 out of 3,104 cases. Baginsky found in 933 cases no such disease, unless the lungs and bronchial glands were also affected.

Many observers have succeeded (Böllinger, Crookshank, Sidney Martin, de Jong, Arloing, Ravenal, Wolff) in showing that the human bacillus will produce tuberculosis in cattle, chiefly by experiments on calves, although it has not the same degree of virulence as the bovine bacillus. In fact the bovine bacillus appears to be more virulent to all animals used for experimental inoculation. Probably Koch's negative results of experimental inoculation were due to using too small doses of insufficient virulence.

Another argument against Koch's views is that it can be shown, by feeding experiments, that tuberculosis may result without the production of a primary lesion. Thus the cervical glands of the pig (Woodhead) and the mesenteric glands of the guinea-pig (Cornil and Babes, Baumgarten, Klebs, &c.) may become tuberculous, although no local evidence of disease can be found. Bacilli have been found in the tonsils with an apparently intact mucous membrane (Dieulafoy, A. Latham). The experimental infection of the nasal mucosa by rubbing on sputa will cause tuberculosis but no local lesion (Cornet, Renshaw). Thus it appears that the bacillus can enter through an intact mucous membrane, *i.e.*, intact to the naked eye. Whether it can pass through a healthy mucosa is a matter of doubt. It is so easy to suppose some local defect of nutrition or vitality to account for it.

Milk is the staple article of diet during the first year or more of life. In the case of hand-fed children it is usually cow's milk, especially among the better classes. There is no doubt that much milk is sold containing the tubercle bacillus. Yet tuberculous lesions in the abdomen are not very common. They are more common among the poor than the rich, although, or perhaps because, the former get less milk. In addition, the milk obtained by the poor is likely to be poorer in quality, cheaper, and perhaps infected, whereas among the better classes more care is taken in obtaining and preparing it. Among the poor all the predisposing factors are much more in evidence, but I can find no indication that a higher percentage of children fed on cow's milk get tuberculous peritonitis than of those fed on condensed milk. I regard the latter as the more susceptible.

The alimentary canal is certainly very insusceptible to infection by the human tubercle bacillus. This is shown by the frequency with which we find no intestinal infection and no caseation of mesenteric glands in infants and young children who have been for weeks or months swallowing sputa from tuberculous cavities in the lungs. Still, the result of autopsies on children at Great Ormond Street, shows that 59 per cent. of tuberculous children have tuberculous mesenteric glands, and that 80 per cent. of cases of tuberculous mesenteric glands showed ulceration of the bowel. From this it follows that 47·2 per cent. of tuberculous children have ulceration of the bowel, a percentage which seems unduly high.

Statistics like this strongly suggest alimentary infection. We ought, indeed, to have large numbers of instances of alimentary infection if tuberculous milk is widely distributed, and if the bovine bacillus is much more virulent than the human variety. There is no reason for assuming that man is an exception to other animals in the degree of susceptibility to infection by the bovine bacillus. Supposing the bacillus to pass through the stomach uninjured, and to be able to pass through the intact mucous membrane of the intestinal tract, two channels are open to it. It may pass into the blood stream and be carried to the liver. If it take this course the liver must have a powerfully destructive effect, for tuberculous foci in the liver are rare, except in the case of an acute general dissemination. Or it may pass by the lymph channels to the glands and be there destroyed, or set up caseation. The glands act as a dam, and should the dam fail or burst, the bacilli may pass onwards into the thoracic duct and so to the blood, giving rise to a general infection.

Assuming that the bacillus reaches the systemic circulation by this course, why is it that the lungs and thoracic glands are the organs commonly infected? The infected blood will be distributed throughout the systemic circulation and, with the exception of that which passes by the bronchial arteries, only reach the lungs after passing through the body and the right side of the heart. The bronchial glands are caseous in 75 to 80 per cent. of tuberculous children. Not all the lymph from the intestines passes through the glands, so it is possible that the lymph stream may be infected and the bacillus may set up tuberculous disease in glands further on, such as the mediastinal, or may pass into the thoracic duct and blood stream without going through a gland.

We have, therefore, to assume that if the bacillus reaches the bronchial glands *via* the intestinal canal it does so by evading the mesenteric glands or by passing into the blood stream, and then for some cause or other being carried to these glands. Much more evidence is required before we shall be justified in accepting such an assumption.

Tubercles may occur in and block small arteries or veins. They may break down and cause general dissemination. Such an explanation might be theoretically true of some cases of tuberculous peritonitis. It is not a wild speculation to suppose that the tuberculous process might extend from a gland to an artery, or that an artery might be directly infected through its vasa brevia, and that on breaking down a dissemination in the parts supplied by that artery might result. So far I have been unable to find clear post-mortem evidence of such limited arterial distribution.

Wide dissemination suggests distribution of the infective agent by the blood stream. Wide dissemination is common in infancy, and is most commonly secondary to caseation of a thoracic gland. Dissemination by the blood stream does not, however, clearly explain the limitation of the spread to the peritoneum. We are driven to the view that, if this be the mode of infection, the bacilli must be simultaneously and equally widely distributed throughout the systemic circulation, but that they are destroyed elsewhere than in the peritoneum. We may note in this connection how rarely tuberculous nodules are found in the skin, and that in acute miliary tuberculosis few tubercles are found except in the lungs, unless the illness is rather prolonged. It is probable that in the healthy peritoneum, as in other tissues, the bacilli are destroyed, but that if the resisting power of this large serous membrane be impaired a tuberculous peritonitis will ensue.

As a parallel to this I would suggest that outbreaks of miliary tuberculosis can occur in the system as a whole, or in portions of it, without causing the death of the child. Just as we get ocular evidence of the recovery of cases in which the peritoneum has been found studded with tubercles, so we have clinical evidence which indicates to me that some of the cases diagnosed as capillary bronchitis, ending in recovery, may have been due to an attack of dissemination of miliary tubercles in the lungs.

Though I am inclined to the view that tuberculous peritonitis is usually due to infection through the blood stream, I regard the caseous form as more commonly due to rupture of a caseous mesenteric gland, or to extension from such a gland, in a somewhat similar manner to the extension from a caseous bronchial gland to the lung. At present we seem hardly justified in stating that the mesenteric glands become caseous as a result of infection from the intestine. It is quite possible that the bacillus is carried to the gland by the blood. Even in advanced cases of tuberculous ulceration of the small and large intestine we do not invariably find caseous mesenteric glands. This was very remarkable in a case I showed before the Medical Society (*Med. Soc. Trans* Vol. xxiv., p. 272). The ulceration was extreme, the glands were not caseous, the peritonitis was limited to the bases of the ulcers, and there was an old tuberculous focus in the apex of one lung. If we get no caseation in the glands in such a case as this, how much less probable is infection of the glands through the mucous membrane of the healthy intestine. In a few instances the peritonitis appears to be secondary to a primary tuberculosis of the genital organs. More often both are secondary.

The predisposing causes which render the peritoneum susceptible are mainly those due to improper feeding, gastro-intestinal disturbance, and general malnutrition. Another factor, very prevalent among the poor, is unsuitable clothing. We constantly see that the ordinary child of the poor is badly clad, with the clothes so arranged as to hang from the shoulders. When the child is lifted up, under the arms as so often happens, the abdomen is seen to be bare, or, at any rate, only protected by a thick layer of dirt. In young children, and in girls for many years, the abdomen is insufficiently protected. Perhaps this is the explanation of the greater frequency of tuberculous peritonitis in females in later life.

Constantly in the early stages of the disease we find a distended belly, flatulence and constipation; a condition we cannot invariably diagnose as incipient tuberculous peritonitis. Such symptoms often, but not invariably, prove tuberculous.

In conclusion, I would suggest that it is not proved that all forms of tuberculous peritonitis are due to the same brand of bacillus. Both clinically and pathologically we seem to have grounds for supposing that the bacillus exerts a different effect according as it is of the human or possibly the bovine species. Certainly, in some instances of chronic tuberculosis in children the character of the spleen closely simulates that seen in the tuberculosis of guinea-pigs The question is one well worthy of patient elucidation.

A special meeting of the South-West London Medical Society is to be held at the Drill Hall, Clapham Junction, on Friday, January 2nd, to consider the course to be pursued in view of the attitude adopted by Mr. Troutbeck the coroner for the district, towards medical practitioners. All members of the profession are invited to be present.

A deputation from the Imperial Vaccination League is to be received by the President of the Local Government Board on January 14th to discuss forthcoming vaccination legislation.

A CASE OF LYMPHADENOMA ASSOCIATED WITH RECURRENT FEVER. (a)

By HENRY T. BEWLEY, M.D.,
Physician to the Adelaide Hospital,
AND
J. ALFRED SCOTT, F.R.C.S.I.,
Pathologist to the Adelaide Hospital, and Professor of Physiology, R.C.S I.

Cases of long-continued pyrexia, not due to any of the ordinary causes—tuberculosis, typhoid, or septicæmia in its usual sense—occasionally occur, and, from their obscurity as well as rarity, deserve some consideration. The case we are about to bring before the Academy presents many cases of interest.

Case.—Mr. H., born in 1865. His mother died of phthisis. He was a man strongly built, and about 5 ft. 8 ins. in height. He went to sea as an engineer on various cargo-steamers, and was in many places where malaria exists, but never had an attack of this disease. He contracted syphilis six or eight years ago, and was treated with mercury; it was a mild attack, and he never had any recurrence of its symptoms. He remained at his work as an engineer till 1898, when he was employed on a grain steamer. Here he was greatly exposed to the dust of the grain while the boat was being loaded and unloaded, and he seems to have suffered in some way from its effects At any rate some of his friends thought he never seemed quite the same man afterwards.

In 1898 he left his work on board ship and became a commercial traveller, travelling mostly in the North of England. His health kept very good till the end of October, 1900. At this time he began to feel poorly; he became disinclined for work, lost his appetite, and developed a cough. He consulted a doctor in Hull, who found his temperature was 101° or 102°, and believed he heard some râles in his right apex. The doctor concluded Mr. H. was developing phthisis, and advised him to go home.

I saw him at his father's house in Ranelagh, on November 11th, 1900. His temperature was raised and he obviously felt very unwell, but I could not detect any physical signs of disease in either lung. In fact there was no sign of illness except the pyrexia. There were no spots; the spleen was not enlarged; his urine was healthy; his pulse quiet, from 66 to 80; his heart sound; his bowels rather confined, so that an occasional dose of cascara or other purgative was needed. He could take light food fairly well. He had some cough, rather paroxysmal in character, and tending to end in retching, and occasionally in vomiting. From the absence of every other obvious cause of fever I began to suspect an anomalous case of typhoid, and Dr. Scott kindly examined his blood for me. He found Widal's reaction present, though not in a very marked degree, so we concluded the disease was typhoid.

The attack lasted four weeks; then, after a week's interval of normal temperature there was a relapse of ten days' duration; then, after ten days, a second slighter relapse of ten days. After this his temperature remained down; he grew stronger: ate largely and grew fat, and went to Llandudno on February 6th, 1901. He remained there for a month and though he became fairly well he never got quite strong, and suffered from cold perspirations, also from pain and tenderness in his feet.

He came home on March 7th, 1901, very fairly well, but soon developed a cold and again became feverish. I again failed to detect any physical sign of any disease. He, however, was more ill than during his first attack, less able to take food, and more depressed. His temperature, the course of which was quite irregular, tended to rise. On April 9th Dr. Little saw him with me, and agreed with me that his organs were healthy. Arguing, however, from the paroxysmal cough, which often ended in retching, he thought there were probably enlarged intra-thoracic glands, either syphilitic or tuberculous, irritating some of the nerves in the thorax, a view which is remarkably borne out by the autopsy.

(a) Read before the Section of Medicine of the Royal Academy of Medicine in Ireland on Friday, November 21st, 1902.

Mr. H. became worse, began to be delirious at night, his temperature was found to be persistently about 103°. Dr. Scott again examined his sputum, urine and blood. The urine was healthy; there was no trace of tubercle or malaria; there were no microbes found in the blood; the blood-count was as follows:—

Red blood corpuscles, 3,570,000 per cm.
1 or 2 white in 2,288.
Hæmoglobin, 90 per cent. = 1 3 normal per red blood corpuscle.

All treatment—quinine, mercury, arsenic—was quite ineffectual. It looked as if he were going to die, when on April 26th his temperature began to fall; fell to normal in three days; never rose again; and in a week he was out in the garden, practically well. His family had nursed him, but on April 25th a nurse came, and the improvement seemed to date from several enemas which she gave him, and which thoroughly cleaned out his bowels.

On May 10th he went to Howth and seemed well, but could only walk a short way owing to numbness and tenderness in his feet, which I thought might be due to slight neuritis.

On May 18th his temperature again began to rise; Dr. Little had suggested a sea voyage, and he now resolved to go to Monte Video, for which place he sailed on May 30th, the temperature being then about 103°.

The fever continued till he left Rio on his way back, about the beginning of July. He came home on July 23rd looking well and stout. He was able to walk three or four miles, but still complained of his feet. He spent a month in co. Wexford with friends, and became very fat—almost 14 stone in weight. He came home on October 9th, but soon became dull, apathetic, disinclined to go out. I saw him again on November 2nd, and found again fairly high fever, with nothing apparent to account for it. He steadily became weaker, took but little food, and as he could not be nursed properly at home, came into the Adelaide on November 18th. From that time on his temperature was from 102° to 104°; his bowels were rather confined; he needed occasional purgatives; the urine contained a trace of albumen. Dr. Scott examined his blood on November 26th and found—

Red blood corpuscles, 3,725,000
White blood corpuscles, 1 in 600.
Hæmoglobin 37·5 per cent. = ½ normal per red blood corpuscle.

Thence he became steadily worse; his pulse became weak and frequent, 100, 120, 140. Rhonchi developed in the bronchial tubes; he became delirious, then comatose, and died, as fever patients die, of heart failure on December 2nd, 1901.

To sum up:—This man came of a tuberculous family; had had mild syphilis about 1895; was quite strong till November, 1900, when a fever commenced which lasted over five weeks, and was followed by two relapses of ten days' duration each. He was well for about six weeks; then (about March 15th) a condition of high fever came on and lasted six weeks, ending by crisis on April 27th. On May 18th pyrexia again came on, lasting till the beginning of July. Then he was well till the beginning of November, when high fever recommenced and lasted four weeks—till his death. During all this time, if we exclude the first attack and the relapses, which were probably due to enteric, no one could discover any cause whatever for his pyrexia.

The post-mortem examination showed that the body was well nourished, although not so stout as he had formerly been. In the thorax a large mass could easily be seen under the sternum, in front of the trachea. This lay over the upper portion of the pericardium, and extended on each side above and behind the roots of both lungs, lying round the œsophagus and behind the heart. Roughly, its dimensions were about four inches wide at the upper part and about five inches long at the back. It was made up of a number of ovoid masses, like large lymphatic glands, about ½ inch to 1½ inches diameter. These when cut appeared of light grey colour, with black spots scattered through them (absorbed carbon). In some cases these latter were absent. A small separate mass of similar appearance, about ½ inch diameter, was attached to the inner pleural surface of the upper lobe of the right lung, extending about half its size into the lung substance. The middle lobe contained a small oval mass ¾ inch long, apparently calcified at the centre.

In the abdominal cavity more of these apparently enlarged glands existed at the attachment of the mesentery round the aorta, and in the mesentery a calcified mass, about one inch long, was found. A small grey spot was noticed on the liver surface. The spleen was enlarged, measuring about 6 inches by 3½ inches, and weighed 1 lb. 2 ozs. The surface was mottled with irregular, light patches, which could be felt to be firm, and which appeared on section to be in the substance of the spleen. Those at the capsule looked like small infarctions.

The intestines were examined through their whole length. Peyer's patches were almost completely absent. In one spot a few follicles were scattered over an area, which was thinner and paler than the surrounding portion, and other oval pale portions could be seen, about the size of a Peyer's patch. These were probably the scars of old typhoid ulcers. No *increase* of the lymphoid tissue was seen.

The heart, brain, kidneys, suprarenals, and thyroid were normal.

Microscopically, the appearances of the thoracic tumours and the growths in the liver and spleen were very similar. Those in the thorax are principally composed of fibrous tissue strands, with a few cells lying between them. Most of the cells are small, similar to lymph cells, with a few larger ones, some of which have apparently more than one nucleus. In the spleen the fibres were finer, but otherwise the general description was the same.

The appearances agree with those described by Greenfield (*Path. Soc. Jour*, 1878, xxix., p. 272) as found in some cases of lymphadenoma, and is apparently the same condition called by Virchow lympho-sarcoma. There are two extreme forms found in this disease. In the majority of cases they appear to be simply enlarged glands with, perhaps, an apparent removal of the normal structure by an overgrowth of cells. In other cases—whether a later one or not it is difficult to determine—there is an overgrowth of the connective tissue fibres, with an inverse reduction in the number of lymph cells, together with the presence of multinucleated cells, possibly endolithial. Occasionally the arrangement of the cells suggests the appearances seen in some sarcomata, which is emphasised by the tendency of these tumours to form metastatic growths in other organs. The growths at present under consideration apparently belong to those cases associated with an increase of the connective tissue, the appearance being very like those figured by Greenfield.

Sections from various portions were examined for micro-organisms, none being found. I thought some would have been there from the history of steamer dust. While it is possible that such may be present which cannot be stained by present methods, it is also conceivable that they may have been a factor in the case at an early stage and have vanished subsequently. This, indeed, has been noticed, in a case quoted, by Shaw (*Edinburgh Medical Journal*, December, 1901), to which our attention was directed by Dr. Little, and has been of great use. None were found in this case, when the blood was examined during one of the febrile attacks. Might it not be possible that such were inhaled a couple of years ago when on the grain steamer, and that these micro-organisms started some interstitial inflammation which continued to increase although the actual cause was removed? There was no leucocytosis on either of the occasions when the blood was examined, a result which is not surprising in the light of the post-mortem examination, so many of the lymph glands being reduced to simple masses of fibrous tissue.

It is difficult to discuss the question of the intermittent high temperature; nothing was seen which would give any reason for it. Micro-organisms have been seen in published cases coinciding with the periods of high temperature, but not in this case.

The temperature appears to be generally higher than normal in Hodgkin's disease, though not always intermittent. In these cases it has been suggested that the high temperature coincides with the period of active growth of the tumours where such do not grow quite regularly.

Which of these two views is correct? Do some cases of lymphadenoma form in their growth some poison which causes fever? or are the attacks of fever due to the more or less accidental entrance into the body of microbes? To these questions it is not yet possible to give any definite answer. Dr. Shaw (*loc. cit.*) favours the latter view. The closing sentence of his paper will express much of what is known on this obscure subject. He writes: "Consideration of the above cases impresses the view that 'lymphadenoma with recurrent fever' is not a special form of disease; that such cases are due to a terminal infection occurring at any time during the last year of life of some patients affected with lymphadenoma; that the nature of the bacterial invasion is different in different cases; and that in some cases proof of a bacterial invasion is wanting; that in a considerable number of cases of lymphadenoma with recurrent fever there is a great constitutional disturbance with elevation of temperature, rigors, vomiting and diarrhœa, anorexia and malaise; that in some cases urobilinurea is a marked symptom; that in some of the cases the superficial lymphatic glands and even the spleen became very tender and enlarged during the attacks; and that the skin over the enlarged glands may become reddened and show increase of local temperature. Finally, that the prognosis in such cases is, as a rule, hopeless, and that the duration of life after the onset of the periodic attacks of fever averages about seven and a half months, but may be as much as twelve or fourteen months."

ON FOUR CASES OF PERFORATING GASTRIC ULCER OPERATED UPON, WITH THREE RECOVERIES.

By ROBERT JONES, F.R.C.S.E,
Hon. Surgeon, Royal Southern Hospital, Liverpool, &c.

Three of the operations which I report occurred in the hospital. My first took place outside, and I include it in this report in order to emphasise the great advantage of operating at once.

The patient was a girl, æt. 19, well developed, and exhibiting no obvious signs of anæmia. She was a shop-girl, and had been accustomed to long hours and hurried meals. When nine years old she had been treated for a tuberculous elbow, and later for a tuberculous dactylitis. For the last seven years she had enjoyed the best of health. Until a fortnight previously to her present illness, apart from a very occasional dyspepsia, generally due to some dietetic indiscretion, she had exhibited no signs of ulcer. She admitted being treated for palpitation two years before, and that she had been ordered to take iron pills.

A fortnight before I saw her she had returned from her summer holiday, and after an attack of sea-sickness had complained of pain after every meal. From its severity, the ease with which it could be localised, and the tenderness on pressure, the doctor diagnosed a gastric ulcer, and gave full instructions as to diet. A few days later the urgent symptoms arose, and Dr. Bennett hurriedly attended. He found the girl in very great pain, extremely tender over the abdomen, with rapid pulse and drawn face. I was sent for, and in less than three hours after the onset of acute symptoms the operation was begun. A median incision was employed, and the stomach explored, when a small opening was found about large enough to admit a crow-quill. Through this some food had travelled, consisting of partially digested milk. There were no adhesions and barely any signs of even local peritonitis; a little lymph surrounded the orifice, which could be removed with the finger. The edges of the ulcer were not indurated. There had been some escape of gas into the abdomen. The ulcer was situated on the anterior surface of the stomach, a little below the lesser curvature, and quite at the pyloric end. There was nothing, therefore, to prevent a rapid inversion of the ulcer; and having roughened the parts around, a row of Lembert sutures completed the occlusion. The abdomen was irrigated, and the wound was closed without drainage. The patient vomited twice during the night and complained of great pain over the abdomen, and the temperature the following day was 101° and the pulse 115. Two days after the operation there was no pain, the tongue was moist, the pulse 96, the temperature normal, and the patient evinced but little desire for food or water.

On the third day she was fed on small quantities of peptonised milk, which gave her no inconvenience. In three weeks after the operation she was sitting up; and in seven weeks, having taken fourteen days' holiday, she resumed her work. Nearly three years have passed since the operation, and I have every reason to believe she is still well.

The operation lasted less than twenty minutes, and every circumstance favoured her recovery.

The small size of the perforation, the absence of induration, the condition of the surrounding peritoneum, the site of the ulcer, the small quantity and character of the escaped contents, and the fact that only three hours had elapsed since the rupture all rendered the prognosis good and the operation easy. From a study of the girl's history, and the appearance of the ulcer, the possibility of a tuberculous origin is worthy of note.

The second case was sent to me at the Royal Southern Hospital, on November 12th, 1898, by Dr. Humphreys, who had diagnosed a perforation. The patient was a woman, æt. 21. Thirteen hours previous to admission she had been seized with violent abdominal pain and vomiting. I was in the hospital when she was admitted at three o'clock. She looked very distressed, and complained of great thirst, and suffered intense abdominal pain. The pulse was 120, very weak, but not running in character. Her extremities were cold and the abdominal muscles very rigid. A rub could be heard accompanying respiratory movements over left lower ribs in front.

We decided to operate at once, and I wish to acknowledge the help of my colleague, Dr. Alexander. On opening the abdominal cavity, the surface of the colon and stomach were seen to be coated with lymph and to have become adherent to the lower surface of the liver. Adhesions had also formed between the stomach and the abdominal wall. These adhesions were carefully separated, revealing behind a cavity from which oozed brown fluid containing partially digested food. The opening from which this came was found high up beneath the liver, on the anterior surface, nearer the cardiac than the pyloric end. There was considerable difficulty experienced in bringing the ulcer sufficiently to the surface to enable us to stitch. The perforation would about admit a small finger. It was indurated and surrounded by lymph, which was firm and adherent, and was carefully removed by a Volkmann spoon. We then proceeded to introduce sutures, but found they immediately tore through. A silk suture was therefore passed as near the interior of the stomach as we felt to be safe, and made to surround the gastric opening. This was tightened in purse-string fashion and leakage prevented. The wall of the stomach was further brought over it and fixed by a row of Lembert sutures, while this was further fortified by sewing omentum over the region of the ulcer. The operation area was carefully irrigated with saline solution, and a gauze drain inserted. The patient seemed to bear the operation without material increase of shock, and saline injections per rectum were given for the dual purpose of restoring vitality and allaying thirst. On the next and succeeding days she was starved, with the exception of a drachm of water every hour and enemata of brandy, peptonised meat and milk.

On admission her temperature was 100°, and for the first four days it did not rise. Towards the end of the fifth day it fluctuated, its highest point being 101°.

From this time to the fourteenth day it often reached 102°, but the patient in all other respects, save a rapid pulse, seemed fairly well. On the eighth day the drain, which had become adherent, was removed. My house-surgeon, Dr. Owen, to whom I am indebted, noted on the fourteenth day:—"Patient after the operation progressed favourably up to last night, although throughout the fourteen days the breathing was a little rapid. She was, however, able to take bread and a fair amount of beef-tea, milk, &c., and had not vomited since operation. The temperature for the last week had reached 102° in the evening."

She had no rigors.

At 3 a.m., fourteen days after operation, she suddenly developed a ticklish cough, and soon expectorated a quantity of foul-smelling pus. Her breathing became rapid, and at 6 a.m. she looked cyanosed. I was away from home, but Dr. Alexander was fortunately at hand, and at ten o'clock the patient was anæsthetised and the old sinus explored. There was no collection of pus found. An exploring needle was put into the thorax, but only clear fluid withdrawn. The needle was next passed into the left hypochondrium, and pus withdrawn; this was followed by a free incision, giving exit to a quantity of fœtid pus. The cavity was well washed out. The patient was throughout the proceedings very collapsed, and various restoratives were prescribed, including strychnine, digitalin, saline solution, brandy enemata, and sinapism to præcordium. At noon she had sufficiently rallied to inspire hope. In the evening she died.

A post-mortem examination was made by Dr. Owen and Dr. Humphreys. They report that the sinus, which was left at the top of the original laparotomy wound, did not lead to any collection of pus. The upper surface of the liver was adherent to the lower surface of the diaphragm by very firm adhesions. The repair of the stomach performed fourteen days before was seen to be healed and the occlusion complete. The abscess cavity, which was opened the day of the patient's death, was seen to lead towards the posterior part of the under surface of the diaphragm. On separating the left lung from the diaphragm, to which it was firmly fixed, a small hole was found entering lung tissue and perforating diaphragm, and discharging foul-smelling pus. A probe passed through this perforation entered the abscess cavity, explored the previous day by my colleague. On slitting up the walls of this cavity, it was seen to be bounded by the under surface of the diaphragm above and externally; by the colon, stomach, and thickened neighbouring tissues below: its posterior part was the opening communicating with the left lung. The spleen was contained in the centre of this abscess cavity. On opening the chest, some clear serum and lymph were found in the left pleural cavity, and several pleuritic adhesions were apparent. On distending the stomach, no fluid escaped. The wound in the viscus had quite healed, but four of the silk sutures were in situ; the others had disappeared. On the mucous surface a small depression showed where the ulcer had existed. There was no ulcer on the posterior surface.

My third case I saw late at night in consultation with Dr. Fisher, of Sheil Road. The patient, a clerk, with a dyspeptic history, was dining in a café when he was seized with excruciating pain, and fell on the floor writhing in agony. He vomited soon after the onset. A medical man saw him, prescribed morphia and sent him home, where he remained for some hours until Dr. Fisher was called. He stated that his stomach had troubled him for two years, chiefly by way of pain of a burning kind. On one occasion there had been hæmatemesis. Pressure over the stomach always gave him discomfort. Pain generally came on before food, and was usually eased when food was taken. Five or six weeks ago the pain was more constant and more severe, and was localised to the epigastric region. He was fragile, emaciated, and anæmic.

I saw him twelve hours after the onset, and found him lying in bed, having several times vomited. His face was drawn, his pulse 110 and very compressible. There was only a suggestion of distension. The liver dulness was notably diminished, and slightly marked rigidity of the abdomen, absence of abdominal respiration and marked shock.

The history and symptoms pointed to perforation, and two hours later, or fourteen hours after the onset, we operated upon him in the hospital.

The anterior aspect of the stomach was explored, when an opening was found about three inches from the pylorus. Some undigested matter had escaped into the abdomen, and some was noticed issuing from the orifice. Around the opening, which was with difficulty brought to the surface, a considerable lymph exudate was noted, which was carefully removed before dealing with the ulcer. The edges of the ulcer were freshened, inverted and occluded by a double row of Lembert sutures, and some omentum was stitched over the omentum line. Care was taken not to douche the abdomen, and the stomach exudate was merely mopped up by dry aseptic dabs.

The operation, which lasted half an hour, left the patient very collapsed, and we had recourse to hot cloths and strychnine. The patient made an uneventful but slow recovery, now and again vomiting, and once ridding himself of a lemon pip.

The treatment consisted of saline cloths to relieve thirst, alcoholic nutrient enemata, morphia under the skin, and every four hours a teaspoonful of iced water. Feeding by the stomach was very cautiously begun on the fourth day. The patient at this date, eighteen months after the operation, is very fit, having become stout and strong, with barely any dyspeptic trouble.

My last case—a woman of thirty—had been an inmate of the hospital under the care of my colleague, Dr. William Williams. She had been treated for gastric ulcer, and had so far improved that she was allowed to go out. Some weeks later she experienced sudden pain in the abdomen, accompanied by a faintness, retching, but no vomiting. In seven or eight hours she reached the hospital, and an hour later she was on the operating table. Her abdomen was tense and rigid, her liver dulness decreased, her breathing thoracic, with moderate collapse.

On examining the stomach a clean punched-out opening was noted on the anterior aspect, from which issued a thick milky fluid. The opening was grasped by two forceps and drawn up into the wound; this prevented the escape of fluid. A purse-string suture was introduced around the opening nearly half an inch from the edges, and with the two forceps to the outside of the suture ring, the stomach was held while the forceps holding the edges of the wound were depressed and the edges inverted. The circular suture was now made tense and the operation completed by a row of continuous Lembert sutures. No water was introduced into the abdominal cavity, which was hurriedly cleansed by aseptic dry dabs.

The patient made an uninterrupted recovery, and is now, eight months after operation, fat and well, and working.

A greater contrast than that between my first two cases could hardly be found. The first was as simple as the second was complex. The fact that operation was not performed for fourteen hours after perforation was itself sufficient to decide the issue. The adhesions and the involvement of the cardiac end, fixed as it is, rendered suturing a matter of considerable difficulty.

Both my last cases are very encouraging, the third inasmuch as operation was not performed until fourteen hours after the ulcer had opened. Fortunately, but very slight oozing of foodstuff had occurred. In my last case, although leakage had occurred, the character of the stomach contents did not appear to be of a very irritative kind.

It is interesting to note that over 95 per cent. of cases unoperated upon die. Life is rarely prolonged over twenty-four hours. Ulcers are more frequent on the posterior than the anterior surface of the stomach, but perforations are much more frequent on the anterior aspect. This is probably due to the greater facility with which buttressing adhesions form behind. In thirty-one cases operated upon, collected by Barling, twenty-two were on the anterior surface, five on the posterior; subsequent cases confirm this proportion.

What was the cause of this perisplenic and subphrenic abscess not connected with the wound area? Had we found an ulcer on the posterior aspect it would have explained much; but it is noteworthy that cases are recorded where retrogastric and perisplenic abscess have caused death where perforation has occurred on the anterior surface alone. This may be accounted for in one of two ways—either by direct trickling of septic material through the foramen of Winslow into the lesser peritoneal cavity or by lymphatic absorption. In an ulcer on the anterior surface, the gastric contents have but to travel round the right free border of the lesser omentum, and both the greater and lesser peritoneal cavities are soiled; and if the foramen of Winslow be closed by adhesions, the invasion of an abscess in the lesser cavity will be obstructed. This raises a final question, suggested recently by Willoughby Turner, of Brighton. Would it not be wise both to examine the posterior surface of the stomach and, if necessary, to cleanse the lesser peritoneal cavity, which can easily be effected through the layers of the great omentum, or of the transverse meso-colon? The mere irrigation of the greater cavity may be the very means of infecting by septic articles the lesser one; and a survey of reported cases convinces me that, where practicable, irrigation of the greater cavity should not be done. I think it is more advisable to use dry dabs than to dilute, disseminate, and make more soluble the toxic contents. I did not use a drainage-tube in any of my cases.

Mr. Tobin, of Dublin, raises a very interesting question when he pleads that no case of perforated gastric ulcer should be removed from where the lesion has occurred. To anyone who has noted the effect of movement on the escape of the stomach contents, the plea has much to recommend it, and if the diagnosis be correct, the simplest appliances are only needed. Boiled towels, cocaine, a few forceps, domestic needles and thread are all the real requirements in the average case. Many a life has been lost in transit from home to hospital.

Transactions of Societies.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Medicine.

Meeting held Friday, Dec. 19th, 1902.

Dr. C. M. **O'Brien** read a paper on his

EXPERIENCES OF A YEAR'S TRIAL OF THE FINSEN TREATMENT FOR LUPUS,

exhibiting a number of patients already subjected to the method, with short descriptive histories. The cases presented great variety in extent, character, and duration, which varied from two to twenty-eight years. The cure of some and improvement of all attended his efforts, while the cure of others appeared to him to be merely a matter of time. As regards permanency of cure he was of the opinion that the method was entitled to a premier place in this respect. This opinion he formed from personal examination of many cases at the Finsen Institute, Copenhagen, that were cured and remained so from one to six years. He gave a demonstration of the lamp and its method of application, and said that most of the objections hitherto complained of in the use of the French lamp as compared with the Finsen lamp could be obviated by prolonging the duration of each sitting, while at the same time increasing the intensity of the light. The reactions were in all cases better, and penetration to the deeper tissues more manifest.

Dr. **Walter Smith** said that as regarded test of cure naked-eye inspection was not sufficient. His method was to press blood away from the part with a watch glass, and see whether any characteristic brown nodules were still left in the skin. There were different methods of treatment: 1. Excision. He thought that this, combined with careful suturing, gave good results in suitable cases. 2. Caustic treatment, which he did not consider a good one. 3. Radiant energy treatment, of which the Finsen light was a form. The Finsen rays might be defined as filtered light, as only the violet end of the spectrum is used. The action of the light was conditioned by the body on which it fell. In the therapeutic contrast between Finsen rays and X-rays, the latter appeared to have a much more stimulant effect on nutrition of skin than Finsen rays. The X-rays will promote growth of hair, but if pushed too far will produce a depilatory effect.

Sir **George Duffy** said that in his hospital they had used the Finsen light since April last, and had had a number of cases which were more or less successful. As regarded cosmetic effect it seemed to be extremely useful in some cases, in other cases the disease was entirely arrested. He had used certain applications in conjunction with the light treatment when the disease was spread over too large surface for the lamp to cover at once, such as a weak ointment made with pyrogallic acid. He had sittings of fifteen minutes, and even this he sometimes found too long. Some cases reacted more than others. The scar left was more pliable and softer than that resulting from any other treatment.

Dr. **Watson** said he had treated about twenty cases of skin disease with X-rays. He used the ordinary apparatus, covering up all the sound tissues with lead foil. It was mostly used in those cases of lupus which had refused operation, but those cases which had been previously scraped reacted quicker and better.

Dr. **Kirkpatrick** had seen a good many cases of lupus treated by scraping, and he thought the reason that this treatment had fallen into disrepute was that patients expected to be cured by one operation, whereas it needed frequent repetition.

Dr. **O'Brien**, in replying, said that a surgeon could not completely remove the disease. The light treatment would cure completely if it were given sufficient time. As regarded difference between X-rays and Finsen light, the ultra-violet rays were supposed to be bactericidal. With regard to applications Finsen used a 6 per cent. pyrogallic acid ointment along with the light, to give better transmission with beneficial results. His experience was that fifteen minutes' sitting gave scarcely any reaction, and he had prolonged sittings to an hour and ten minutes.

Dr. **Joseph O'Carroll** recorded a case of

PAROXYSMAL TACHYCARDIA

which came under his notice in the Whitworth Hospital, Dublin, in July, 1901. The patient was a governess, unmarried, æt. 34, who fourteen years previously began to suffer from attacks of violent sub-sternal pain accompanied by rapid cardiac action. These attacks, occasional at first, gradually grew more frequent, till in 1900 they had increased to about five per week. In duration they varied from a few minutes to a few hours. Their onset was preceded by dimness of vision, sometimes amounting to almost complete blindness. Tachycardia was a constant accompaniment of the pain, the heart's rate on some occasions reaching 260 beats per minute. An attack would end by a brief but violent exacerbation of pain and a subjective sensation of something shifting from left to right in the thorax. Many lines of treatment were tried in vain till finally Dr. O'Carroll administered bromide in gradually increasing doses, when, *post hoc* or *propter hoc*, the paroxysms of pain and heart hurry improved so much that it is now six months since the last attack. The author suggested the possibility of this case being one of "visceral epilepsy."

Professor Thompson, Dr. Leeper, Dr. Travers Smith and Dr. Walter Smith spoke.

HARVEIAN SOCIETY OF LONDON.

Meeting held December 18th, 1902.

Mr. Watson Cheyne, C.B., F.R.S., the President, in the Chair.

Clinical Evening.

Dr. A. **Morison** exhibited a child five months old who showed the dilated veins which a French author described as "venous dystrophy," and attributed to specific disease. Dr. Morison could find no evidence of specific disease in the case exhibited, and ascribed the malnutrition of the child and the increased intercranial pressure to over-production of children by a delicate mother rather than to specific disease.

Dr. **Wilfrid Harris** showed a woman, æt. 24, who suffered with a sore throat, not diagnosed as diphtheria at the time, January, 1900. A few weeks later she had difficulty in swallowing, and nasal regurgitation with altered voice. Later on the muscles of the eyes and lips became affected. In November, 1901, she was treated by hypodermic injections of strychnine, but she became worse. Her present state.—There is complete paralysis for reflex and voluntary movement of the palate, bilateral wasting and almost complete paralysis of the orbicularis palpebrarum, and less marked in the orbicularis oris. Tongue partially atrophied and weak. Sensation diminished on pharynx. Deep reflexes all brisk, plantar reflexes could not be obtained. Electrical reaction very slight to strong Faradism in soft palate with well-marked reaction to galvanism, K > A. Very slight reaction to Faradism in orbicularis palpebrarum, with better marked reaction to galvanism K > A. Under treatment with galvanism of affected muscles for five months, and with iodide of potassium in ten to fifteen grain doses three times a day, the condition had scarcely altered.

Dr. **Risien Russell** showed a case of peripheral neuritis with paralysis of the right side of the face of peripheral type, paralysis of the right external rectus, slight paresis of the left external rectus, and well-marked double optic neuritis subsiding into atrophy. Under treatment the paralysis of the face and of the external recti had recovered, and the limbs were also improving, though the patient was still unable to walk or stand. No cause had been determined, but the appearance of the patient and the features of the paralysis of the limbs made alcohol most probable.

Dr. G. **Cautley** showed, for Mr. P. L. Daniel, a woman, æt. 63, on whom resection of the supraorbital nerve had been performed for severe neuralgia. The pain followed a bad attack of herpes in the region supplied by this nerve, and was accompanied by marked trophic changes in the skin and hair, affecting also the blood vessels. Medical treatment proved useless. There is an extensive scar on the right side of the forehead and right eyebrow with lachrymation and blepharospasmus, loss of hair, and considerable thickening of the scar of a keloid nature, with vascular maculæ. At the operation two nerves were found, and about half an inch excised. The blood vessels were much compressed. The operation had done no marked good to the pain, but the nutrition of the affected parts had somewhat improved.

Mr. **Jaffrey** said he had seen marked improvement in certain cases of severe trigeminal neuralgia by the injection of osmic (a) acid into the affected nerve. In a case of his own, where the third division of the fifth nerve was affected, he trephined the ramus of the lower jaw and injected osmic acid into the inferior dental and gustatory nerves with complete success.

The cases were also discussed by Mr. Campbell Williams and Dr. G. H. Barton.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

Meeting at Manchester, Friday, December 19th, 1902, Dr. S. **Buckley**, President, in the Chair.

Dr. **Lloyd Roberts** (Manchester) showed a specimen of a

PAPILLIFEROUS CYSTADENOMA REMOVED FROM THE ABDOMINAL WALL FOURTEEN YEARS AFTER OVARIOTOMY.

The patient, æt. 48, married, 7-para, last child born four years ago, had noticed a lump in the abdomen for about six months. It was steadily increasing. The left ovary had been removed for cystic tumour about fourteen years before. The tumour was felt just to the left of the cicatrix left by the former operation. It was attached to the abdominal wall, but fully movable otherwise. It felt hardish, but resonance was only slightly diminished over its surface. The abdomen was opened and about three pints of ascitic fluid escaped. The tumour was found to be attached to the cicatrix, and was intimately connected with the parietal peritoneum. Some coils of intestine adhered to the under surface and required separation. The cyst was carefully detached and removed. There was no pedicle. The right ovary was healthy, and there was no trace of the left ovary which had been removed fourteen years before. The patient recovered. The specimen was described as a papilliferous cystadenoma of the subperitoneal tissues of the abdominal wall. The structure closely resembling that commonly occurring in the ovary, suggests that the growth is secondary to the ovarian tumour previously removed.

Dr. S. **Buckley** (Manchester) showed a large fibromyoma and cystic ovaries removed by abdominal section. The operation was undertaken in consequence of the severe pain, especially on the left side, which had existed for two or three years. There had recently been an increased menstrual flow, but this increase had not been sufficient to interfere with nutrition. When the abdomen was opened a large fibroid was found attached by a short, broad pedicle to the fundus uteri. This was removed by myomectomy, as were also two smaller fibroids from the anterior surface of the uterus. The ovaries were found cystic and enlarged to the size of large walnuts. They were adherent and wedged between the tumour and the uterus, and, after separation, were removed, together with the tubes. It is probable that the severe pain had been chiefly due to the adherent condition of the ovaries and to their compression by the growth. The patient recovered well and was free from pain.

Dr. W. **Walter** (Manchester) showed a solid ovarian tumour removed from a patient, æt. 58. The swelling had been noticed about three years, but during the last twelve months it had increased more rapidly, and the presence of ascites had become obvious. There was no loss of flesh or cachexia, but the patient's three sisters had suffered from abdominal tumours. The tumour had a short pedicle, and was so closely adherent to the back of the uterus that the signs were those of a uterine rather than of an ovarian tumour. The ascitic fluid was reddish, and amounted to about two pints. The other ovary was cystic, and contained a small fibroid nodule. The microscopical sections showed the growth to be a simple fibroma with commencing myxomatous degeneration. The patient made a good recovery. The question of diagnosis and prognosis in solid ovarian tumours was discussed.

Dr. **Walter** also showed an ovarian cyst with twisted pedicle. The tumour had been known to be present for some time, but rapidly increased in size after an injury. Sections of the cyst showed interstitial hæmorrhage which had separated the layers of the wall.

Dr. H. **Briggs** (Liverpool) showed (1) a small ovarian cyst (2¼ by 4¼ ins.) associated with metrostaxis and retro-uterine hæmorrhage. The source of the bleeding was not obvious, but there was no possible evidence of extra uterine gestation. (2) Fundal fibroid polypus and inverted uterus. The uterus and growth had been successfully removed by vaginal hysterectomy. The patient having passed the menopause no attempt was made to save the uterus. Reposition of the uterus after removal of the polypus would no doubt have been impossible. (3) Early cancer of the cervix uteri, with questions as to the early symptoms of the disease.

Dr. **Arnold W. W. Lea** (Manchester) related a case of acute prolapus of the urethra. Owing to the œdematous and strangulated condition of the prolapsed mass it was found necessary to resect this part of the urethral mucous membrane. The result was completely satisfactory.

The cause of the condition was discussed but was not definitely explained. There was a little cystitis, but this was probably not present before the attack. Masturbation was suspected as a possible cause.

The papers were discussed by Drs. W. Walter, H. Briggs, T. B. Grimsdall, W. E. Fothergill, A. Donald, Lloyd Roberts, E. T. Davies, and Mr. Stanmore Bishop.

(a) See *Lancet*, Vol. II., 1899, page 1229

France.

[FROM OUR OWN CORRESPONDENT.]

Paris, December 29th, 1902.

Divergent Opinions on Appendicitis.

M. Championnière spoke at the last meeting of the Société de Chirurgie on the divergence of views among his colleagues on the treatment of appendicitis. They were divided into operations *à froid* and operations *a chaud*. For his part he was extremely struck at the beginning by the frequency of errors in the diagnosis which caused patients to be operated on who were not suffering from appendicitis. But at present he believed that such errors were rare, as the method of diagnosis was very much perfected. On the other hand, he was convinced of the frequent impossibility of foreseeing what might become of appendicitis, and of the necessity of operating, even at the risk of committing an error, in orderthat a patient should not be left to die when an early operation might save. Out of a series of forty-four patients operated on by him during the suppurative period he had twelve deaths; of the remainder several presented lesions of such gravity that they would have succumbed if he had not operated.

As to the dangers of purgatives, which had been so much insisted on by many of his colleagues, he was not entirely convinced, and in that he was upheld by the opinion of his American *confrères*. On the other hand, he considered that opium was extremely dangerous; the gravest cases he had to deal with were those which had been treated at the outset with opium internally and the ice-bag externally. He thought even that in many cases it was the opium itself which had provoked the appendicitis, for he had seen patients operated on who had no trace at the beginning of appendicitis, and who had been submitted wrongfully to the opium treatment.

The divergences of opinion which divided his colleagues were derived in great part from the fact that they did not make the same diagnosis in a large number of cases, and the administration of opium was a potent cause of those differences of opinion: it masked a certain number of symptoms, as well as the clinical evolution of the affection.

It may be remarked here that the speaker who so strongly denounced the classical medical treatment failed to indicate what was the medical treatment which met his approbation. Have we not all, over and over again, had the satisfaction of arresting in its inception appendicitis by the application of ice and the administration of opium internally? To what cases are reserved the operations *a froid*, which, by the way, are by far the most numerous, if not those which had been treated medically during the inflammatory period?

It is true that some surgeons have advocated the application of belladonna and mercurial ointment and poultices, but it is doubtful if the advantage over the classical treatment is sufficient to exclude the latter so completely.

Treatment of Neuralgia.

At the meeting of the Société Médicale, M. Marie related the results he obtained in a certain number of cases of neuralgia from subcutaneous injections of air, as recommended by M. Cordier, of Lyons. The treatment consists in injecting over the seat of pain half a litre of filtered air. In several cases of sciatica, in one case of zona, the pain disappeared immediately. The speaker attributed the good effects of the injections to a kind of extension of the nerve extremities, and also to the formation of an air cushion, which protected the extremities against any external pressure.

M. Chauffard said that for a patient suffering from a pleuritic stitch which had resisted every treatment he recommended an injection of air. The result was immediate; the pain disappeared as soon as the air was injected under the skin.

Germany.

[FROM OUR OWN CORRESPONDENT.]

Berlin, December 27th, 1902.

At the Medical Society Hr. König gave an address on

Operation without Direct Contact with the Wound.

On bacteriological grounds the basic principle was, even before the commencement of the operation, to disinfect everything that came into contact with the wound, the most powerful of disinfectants being heat. Everything pertaining to the operation could be made germ free only in a bacteriological sense, and this was so with the patient's body, but in regard to a most important object, the hand of the surgeon, especially the part under the nails; this had not yet been possible. It could, indeed, be better done with one man than with another; better when the nail grew parallel with the end phalanx, less so when it grew curved over it. Washing in hot water from 40° to 50° C. for ten minutes was the safest method of disinfecting the hands, but this could not be borne by everybody. To this he added the disinfection proposed by Fürbringer.

If we could not disinfect our hands thoroughly there was danger of causing infection, especially in the case of operations on joints and cavities. The uncertainty attending operations in such localities must have led to the thought of avoiding all direct contact with the wounded surface with the fingers. We could not quite dispense with the hand in all operations, but in some it could be done with some little trouble, as in simple extirpation of the appendix *a froid*. If we had to hold back the soft parts, they could first be covered with layers of sterile gauze.

What a large percentage of operations could be performed without contact was shown by the fact that of the last 1,000 performed at the Charité more than 600 were of this category, and amongst them more than 100 operations on joints which recovered without the least disturbance.

The instrumentarium was the usual, except that the forceps all had long handles. The Americal ball forceps were useful. One could even easily learn to apply ligatures without touching the wound with the fingers.

As examples of fingerless operations he mentioned osteotomy in genu valgum and the extirpation of the meniscus in the knee-joint. The greatest success of the method, however, lay in the bloody treatment of fracture of joints, which could be attacked with full certainty. He believed that the adoption of this method would be a blessing to humanity.

Hr. Liebreich then gave an address on

The Action of Borax and Boracic Acid.

He pointed out the danger of having certain things prohibited before their harmfulness was sufficiently proved, as scientific attention was drawn from them and fresh things were sought for. Industries were injured thereby and, not least, the people's food. Boracic acid had been held to be harmless for years. No one suspected that even when consumed in excess it had ever done any serious harm. In England and in other countries it had been decided not to forbid its retention. As regarded borax it had been objected that it prevented food being used up properly. If this were so the nitrogenous constituents of the stools would be increased: this was not the case, however. Then it was believed that borax would be eliminated from the system only very slowly. If that were so there would be no danger in it; as a matter of fact, however, the excretion was completed in a few days. Others asserted that borax caused diarrhœa. But if diarrhœa were set up in rabbits it was because too much water was given. In dogs the stools were neither more copious nor more frequent. Then it was said that borax caused vomiting and headache. This was correct only in so far as when large doses were taken on an empty stomach nausea and even vomiting might follow. It was quite a different thing, however, when a small quantity was added to the food. Intravenous injections of considerable quantities of boracic acid did not injure the kidneys in the least: on the contrary, boracic acid could be given with advantage in kidney disease.

He then discussed two deaths said to have followed the use of borax. One patient had serious cardiac disease, the other softening of the brain.

Hoffmann, of Leipsic, added boric acid to fish water and found that with a 0·25 per cent. solution the fish died in a few days. But with an addition of 0·05 per cent. of vinegar they only lived four hours, and with 0·25 per cent. of citric acid only an hour and a half. No one, however, would say from this that vinegar and citric acid were poisonous. He thought it was a pity that from insufficient and one-sided experiments the governing bodies had been led astray to pass wide-reaching regulations.

Hr. von Bergmann defended the governing bodies from reproach, as if they had passed regulations without sufficient motives.

Hr. Liebreich had not reproached the law-giving bodies. He had only attacked the pronounced opinions of the officials of the Reichsgesund Leitamt, upon which the governing bodies acted.

Austria.

[FROM OUR OWN CORRESPONDENT.]

Vienna, December 27th, 1902.

Mitral Insufficiency.

Reiter presented a case to the "Gesellschaft für innere Medizin" which gave rise to a considerable amount of speculation as to how the sound was produced in mitral insufficiency with a loud musical murmur audible to the patient himself. The history, according to the patient's own account, commenced about four years ago with much coughing, dyspnœa, and palpitation, followed, about a year and a half ago, by a singing noise in the chest. The objective observation defined it as fairly regular, and of a loud, high pitch. Similar sounds are to be met with in tendon deposits with fine trellis threadwork.

Chiari some time ago showed pathological specimens of embryonical inhibition of the cardiac valves, to which he attributed the cause of many of these cardiac musical murmurs. Schrötter, on the other hand, gave similar evidence of malformations associated with endocarditis, examples of which he exhibited, with bicuspid insufficiency. Ritter also showed an anatomical preparation of the heart, in which the left ventricle was crossed by a thin tendrous thread, and which, according to Schrötter's clinical observation, had given a high musical tone during life.

Atrophic Paralysis of the Left Arm.

Weinberger then gave a demonstration from a case of atrophic paralysis in the left arm, with ill-defined localisation. The history of the case runs back to about nine years ago, when intense pain in the left arm, followed by emaciation and paralysis, caused the patient to lie for months in bed. This illness, according to his own account, kept him at home for a year, after which the paralysis began to disappear, and bulk increased. He improved so rapidly as to be able to resume work as a labourer, which he continued till 1898, or four years ago, when he became ill again and was confined for six weeks in bed with the same phenomena that had occurred five years previously. About the end of 1898 another attack laid him by for twelve weeks, and again in January, 1901, he was confined to bed for fourteen days. The pains during these attacks on the left arm were very severe, but receded gradually as the arm continued to improve. Six weeks ago the patient was reattacked in a similar manner, for which he was brought to hospital, and where he has remained with the same repetition of improvement. The arm at the present time seems perfectly healthy, and has increased 4 centimètres below the elbow within the last four weeks. The sensibility has returned to its normal condition, and volition, as may be seen by the patient's movements, which are perfect. When he was received the pain in the limb was intense, but was soon relieved by ordinary sedatives. The diagnosis of the case is somewhat complicated, being remittent in its history, and appears to be one of atrophic paralysis of the muscles of the left arm arising from trophic disturbance and defective sensibility. The recurring stasis and progression of the disease, associated with occasional extension, gives an obscure colour to the clinical history of simple progressive muscular atrophy. It would appear that the subjective and objective signs of disturbed sensibility are absent, owing to their frequent remission, neither is there any pain in the spinal column that can be located. In the case of any pathological growth in the cervical region this retrogressive course could hardly be entertained in a case of intra-medullary tumour or meningeal changes. The diagnosis may thus be reduced to a simple inflammatory process of the ganglionic cells in the grey matter in the anterior horns of the cord or in the nerve itself, and thus reduced to a case of poliomyelitis or probably polyneuritis.

Nothnagel observed that the skin of the left atrophic arm was much thicker than the skin over the right. This thickening of the skin he had often observed over atrophic muscles and bones, and which had often been referred to at the discussions of these meetings as a symptom closely associated with poliomyelitis acuta atrophica in children. The symptoms in these cases he admitted.

Winter Health Resorts.

INNSBRUCK.

[FROM OUR OWN CORRESPONDENT.]

"Nowhere else in the world can be found a town of equal importance placed amidst a landscape of such lofty grandeur and ideal beauty."

Innsbruck is chiefly known to travellers as a convenient resting-place, situated as it is at the junction of several important trans-Continental railroad lines. As a Health Resort, its many advantages are as yet very insufficiently known and recognised. Yet very few Continental places can offer anything even approaching in number and importance these hygienic advantages. Its situation is excellent. It lies in the long wide valley of the River Inn, over 1,900 feet above ocean level, thoroughly safeguarded by a high range of the Bavarian Alps from northerly winds, and fully open to the warm southern sun and south winds of Italy.

Innsbruck has an equable, cold, dry climate, and throughout the bleakest wintry seasons the unique combination of an Italian sunshine with a luminous, dry, mountain air makes its atmosphere a delicious yet positive tonic for the elderly, the delicate, and the convalescent. A cold north wind is unknown here, even in winter. For weak and overgrown children, for those annoyed with sleeplessness and poor digestion, and especially for those suffering from stomachic troubles and similar sequelæ of influenza, a sojourn at Innsbruck will be most beneficial.

As a preventive remedy for any, young or old, predisposed to asthmatic and pulmonary diseases, a winter at Innsbruck is very desirable, and in various ways preferable to what is really a "banishment" to some of the higher and isolated Alpine resorts. The merits claimed for such high stations are likewise found equally at Innsbruck, viz.:—Deepness and purity of atmosphere; absence of objectionable winter winds; freedom from fogs and from persistent cloudy weather; brilliant sunlight; intensity of solar radiation. And together with these merits, at Innsbruck are also found what are not combined at high altitudes elsewhere, namely, all the amenities and attractions of active and flourishing city life—university, colleges and schools, great churches, cathedral and military music, libraries, museum, fine streets and shops, elegant villas, all winter sports, excellent hotels (kept both on English and Continental methods of cooking and of living) at prices very moderate in the leading houses, and very economical yet good in the smaller establishments, so that all preferences and purses can be suited.

In an able article on the preventive treatment of phthisis, Professor Jaccoud, of the Paris Faculty of Medicine, sums up the results of high-altitude experience in the following formula:—"During summer the highest altitudes; during autumn and winter, lower altitudes having the winter characteristics of mountain climates." Writing specially about the treatment of young people, not invalids, but predisposed to pulmonary disease, he recommends that they and their families should not be banished for the long months of autumn and winter to rural or semi rural spots. On the contrary, he recommends as the better method to send them to places where all the merits of a winter home can be found combined with the advantages of a city life. Enumerating at length the points in favour of Innsbruck—its mountainous surroundings, its historic reminiscences, its equable temperature, dry and health-giving atmosphere, picturesque position, numerous promenades and excursions, artistic and intellectual resources, social and material conveniences—"equal to those of the greatest capitals of Europe"—the Professor closes by pronouncing "this city of the mountains, Innsbruck, from the medical point of view, a winter residence admirably privileged."

The Operating Theatres.

ST. THOMAS'S HOSPITAL.

Two Cases of Strangulated Hernia.—Mr. Battle operated on a case of strangulated inguinal hernia in a young man, æt. 24. The patient said that he had had a rupture on the right side when he was a boy, but that it had become cured; more recently there had been some swelling in the right groin, but this had not troubled him until the night before admission, when he had suffered severe pain, and noticed that the swelling was larger and he could not get it back again. He had vomited and been unable to sleep on account of the pain, and there had been no action of the bowels. The case was one of strangulated congenital hernia, and the tumour, which was the size of two fists, was situated entirely above the scrotum. The right testicle was not descended, and could be felt in the wall of the sac. The percussion note was dull over the sac, which last was very tender to the touch. An oblique incision was made over this, and the sac opened; a little brown-stained fluid came away, whilst the rest of the sac was occupied by a loop of small intestine about eight inches long, which was absolutely black. It, however, retained its polish and its elasticity. The constriction, which was at the internal ring, was relieved, and after the bowel had been examined at the place where it had been constricted, it was washed with warm sterilised saline solution and returned into the abdomen. The atrophied testicle was removed, and the sac cut away after ligature of its neck. The structures were then sutured after Bassini's method, and the wound closed without drainage.

The second case was that of a man, æt. 45, who was admitted with a strangulated femoral hernia on the left side. The history was that of a hernia on the left side for some years and of strangulation for two days. There was a femoral hernia about the size of a walnut in the left groin which was irreducible, resistant, and tender. There was also a swelling in the left inguinal region in the situation of the external ring which could be reduced on pressure and gave an impulse on coughing. The patient evidently had two hernias, of which the femoral was strangulated. At the operation a vertical incision was made extending over the femoral and inguinal swellings. It was found that the femoral sac contained a small loop of congested intestine, which was easily reduced after division of Gimbernat's ligament, whilst the inguinal swelling was a direct hernia and contained no bowel at the time of operation. The external oblique was slit up along the line of the canal, and after ligature of the neck of each sac that of the femoral sac was drawn above Poupart's ligament, and the structures sutured as follows:—The opening in the conjoint tendon was closed by the silk suture, which carried conjoint tendon behind the cord and attached it to the fascia over the pectineus below the neck of the femoral sac; other stitches were inserted to draw conjoint tendon to Poupart's ligament; the outer wall of the femoral canal was sutured with interrupted silk sutures, and Poupart's ligament was approximated to the pectineal fascia by means of two more. The wound was then closed without drainage. Mr. Battle said the first case was an example of the rapidity with which serious changes take place in the intestine when strangulated in a congenital hernia; the duration of strangulation was less than twenty-four hours, and yet the gut was absolutely black, and a few hours longer without relief must have rendered it gangrenous. In the second case a combination of a direct inguinal hernia and a strangulated femoral was an unusual one, and the method adopted of producing a radical cure after the operation for strangulation appeared, was he thought, the best possible under the circumstances. He had only met with one example of a similar condition that required operation before.

Both cases made a satisfactory recovery.

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"SALUS POPULI SUPREMA LEX."

WEDNESDAY, DECEMBER 31, 1902.

ANNO DOMINI, 1902.

THE past year has not, perhaps, been distinguished by any of the great epoch-making advances which have from time to time characterised the history of medicine. Much has been done to advance and improve the position of medicine, but this has been done rather by criticism and the development of the knowledge we already possessed than by any startling addition to it. The death on September 5th of Rudolf Virchow, who may be said to have been the very founder of modern pathology, and who during the last fifty-five years occupied a foremost place among the leaders of science, will ever make the year 1902 a memorable one. Virchow's great work was no doubt accomplished; by the training of his pupils he had made provision for its continuance, and by his example and methods he had shown how that advance might be maintained; but the passing of the great master-mind which had fashioned this science and had so long directed its progress must of necessity leave a blank and make us pause, if only for a moment, to consider the heritage he has left us.

The epidemic of small-pox which invaded London during the second half of last year reached very considerable dimensions before it was got under control, and even yet the disease cannot be said to be completely stamped out. That an epidemic of small-pox in London should, in the twentieth century, cause over a thousand deaths does not speak well for the intelligence of the British public, or for the success of the teaching of preventive medicine. The facts, however, brought out by this epidemic are of the utmost value, and should form a conclusive answer to the anti-vaccinator, were that individual open to argument or capable of the reception of truth. We fear that he possesses neither of these qualities, and his pernicious influence still continues to help in the propagation of disease. The figures relating to the epidemic in London published in the Registrar-General's return for the week ending April 12th, 1902, afford conclusive proof, as far as such proof is possible, of the immunity conferred by efficient vaccination and re-vaccination.

They show that among the vaccinated attacked with small-pox during the present epidemic 99·3 per cent. of the deaths were among persons over ten years of age; while among the unvaccinated the corresponding percentage of deaths over ten years of age was only 42·7. It is a matter for congratulation that the disease, though introduced into Dublin, was unable to obtain a footing there, and we trust that it will be a long time before Ireland has to add the introduction of the anti-vaccinator to the list of grievances which she has against the sister country.

The formation of the Imperial Vaccination League, which held its first meeting on December 12th, will do much to further the vaccination and re-vaccination of the community.

The experience of the South African War has had the result of directing the attention of the profession very strongly to the question of the prevention of enteric fever. There can be no question that from the medical aspect enteric fever occupies the foremost place in that campaign. Complete statistics are not yet forthcoming in regard to this outbreak, nor is the information at our disposal as yet sufficient to enable us to make a final pronouncement as to the prophylactic value of Professor Wright's anti-typhoid inoculation. From those figures which have already been published it would appear that the vaccine is of very considerable value, but that the results are not uniform, and that the conditions which determine this want of uniformity are not yet fully understood. If, for instance, we look at the official figures for the garrison at Ladysmith, we find that in enteric there were among the inoculated 1,705 cases, or 2 per cent.; among the uninoculated there were 10,529 cases, or 14 per cent. It would appear that even some who contract the disease and recover from it, do so with an immunity which is below that of the ordinary individual. In other words, the attack appears to have lessened the normal resistant power of the individual, so, too, after inoculation the normal resistant power may be lessened. Whether this result can be avoided or not is at present undecided, and much experimentation will probably be necessary before it can be settled. Considerable advance has been made in our knowledge of the extra-corporeal life of the typhoid bacillus, and in this connection the paper contributed to the Pathological Section of the British Medical Association by Majors Firth and Horrocks is one of great importance, as is also that of Dr. Sidney Martin in the report of the Local Government Board for England for the year 1901-02.

As a result of the experiments there set forth it would appear that the bacillus typhosus has a much more extended existence outside the human body than was formerly supposed. For instance, these observers found that from a piece of karki drill fouled by liquid enteric fæces and then allowed to dry, the micro-organism is recoverable on the seventeenth day. Some few years ago bacteriologists appeared quite satisfied with regard to the etiology and mode of dissemination of enteric fever, but recent investigation has thrown doubts on the accuracy, or rather on the completeness, of our information on these subjects. At present the doctrine that there are several strains of the enteric bacillus, all pathogenic, all producing more or less completely the facies of typhoid fever, but yet not wholly identical and not capable of producing complete mutual immunity against infection by the other. The differentiation of the bacillus typhosus from the bacilli of the enteritidis group cannot yet be said to be satisfactory. Blumenthal in the *Deut. Med. Woch.*, August 28th, recorded a case in which the patient died after an attack of apparently typical enteric fever, in which a positive Widal reaction had been obtained, and although death was supposed to have occurred on the twentieth day of the disease and the bacillus typhosus was recovered from the spleen and lymphatic glands, no typhoid ulcer was found in the intestines. In view of these facts there will, it appears, have to be a revision of our conceptions of this disease in the near future.

The war against consumption, which was started with so much brilliancy last year in London, has settled down into a steady blockade, and already there is evidence of the good results which may be expected from it in the future. Sanatoria are springing up throughout the country, and the lay public appear to be awakening to their duty in the matter. There is, perhaps, no disease in regard to which so much good may be expected from the rigid application of the rules of preventive medicine as tuberculosis. At the International Conference on Tuberculosis, held in Berlin last October, Professor Koch still maintained his opinion, in spite of much opposition, that human and bovine tuberculosis are distinct diseases, and is reported to have enunciated the further opinion that boiling does not sterilise milk, but merely renders it unwholesome. We trust that these opinions will receive more proof than the mere weight of Professor Koch's opinion before they are generally adopted.

The illness of the King and the operation which was so successfully performed on him naturally directed much surgical attention to the subject of appendicitis, and this was further enhanced by the attack from which the wife of the Viceroy of Ireland is now happily recovering. Little, however, that is new has been added to our knowledge of the disease or its treatment. The indications for treatment have been, perhaps, more clearly formulated, but the results still leave much to be desired. One of the most striking features of the surgery of the year is the growth of that tendency, which has been so evident lately, for the surgeon to invade that domain which was formerly looked on as purely medical. Many operations have been done with varying results to relieve the symptom of ascites in cirrhosis of the liver. The results of operations for the cure of gastric ulcer have been most satisfactory, not only in those cases in which perforation had taken place, but also when undertaken on account of hæmorrhage and intractable dyspepsia. Operations have also been undertaken for the cure of chronic Bright's disease, but apparently without much success. G. A. Schmitt, of New York, in an analysis of the cases already recorded, ends his article with the following significant remark:—"Before long the surgical treatment of chronic Bright's disease will probably become fashionable, until mature experience and sober judgment have exposed the fallacy of the proceeding."

On December 9th, 1852, Joseph Lister was admitted a Fellow of the Royal College of Surgeons, London, and during this year the medical profession celebrated the jubilee of that entrance. It is difficult for the young surgeon of the present day to appreciate what he owes to the labours of Lord Lister—labours which have enabled surgery to reach its present position. Some fifty years ago surgery was said by an eminent authority to have reached its zenith, and so perhaps it had, were it not for the introduction of antiseptics and anæsthetics. He would be a courageous man who would now attempt to put a limit to its future development. With asepsis replacing antiseptics, and with our increased knowledge of the functions of the internal organs of the body and improvements in technique, it seems impossible to define its limit.

On July 31st Royal assent was given to the Midwives Bill, which now, after many years of discussion, passes into the Statute Book as the Midwives Act, 1902. It remains to be seen how this much-abused Act will justify the hopes of its supporters.

It would appear that the dispute between the two Royal Colleges in England and the General Medical Council is approaching a final stage. At the request of the Council, the colleges have furnished particulars as to the work in institutions the competence of which had been questioned. These particulars are now to hand, and go far to justify the position which the Council adopted. Of the sixty-two schools recognised by the Colleges and refused recognition by the Council it would appear that no fewer than ten give only one hour a day to the study of science subjects, which even the colleges, we imagine, will consider insufficient If they once admit this, they also admit that they have been fighting in defence of a position which is untenable, and the proper course for them now to adopt is to frankly admit their error.

The question of the conflict of medical evidence in courts of law has again been brought prominently before the notice of the profession in Ireland by the address delivered at the opening meeting of the surgical section of the Royal Academy of Medicine by the President of the Royal College of Surgeons. That something should be done, and that in the near future, if the profession is to maintain its honourable position is evident, but what that something is, is difficult to decide. If, as appears to be the case, the Bench and Bar refuse to join with the medical profession in an attempt to remedy the evil, which they all admit exists, a solution appears impossible.

PLAGUE SERUM AND TETANUS.

From time to time medical men are forcibly reminded of the responsibility attached to the exercise of their profession. It is only by fully informed unceasing vigilance that they are enabled to secure a reasonable amount of safety for a large proportion of the patients submitted to their care. In the exercise of aseptic or antiseptic surgery, for instance, the omission of a single minute precaution may be fraught with the gravest consequences for all concerned. Indeed, it may be said that to acquire a thorough knowledge of Listerian methods in itself constitutes a liberal education. How much the present generation of medical men owe to the grasp both of principles and of details thereby entailed it is impossible as yet to estimate with any degree of accuracy. With the increasing field of scientific knowledge, especially as regards bacteriology, it has been possible to reduce aseptic surgery more and more to the position of an exact science. A similar observation applies, although, unhappily, with nothing like the same extent, to the valuable protective measure of vaccination against small-pox. By degrees scientific medicine has learned how to reduce very materially the chances of contamination by stray micro-organisms by carefully guarding the vaccine, the skin of the patient, and the instruments and hands of the operator. There can be little doubt that sooner or later means will be found to render the process of vaccination absolutely safe from contamination with organisms other than those which confer its specific preventive powers upon the vaccine matter. As a rule the newly-introduced protective serums are fortunately free from dangers of contamination, and are consequently safe if administered with proper precautions by skilled hands. Not very long ago, however, the occurrence of tetanus in a patient who had been treated hypodermically with a particular serum as a cure for aneurysm warned the profession of a deadly danger attached to the serum method. We regret to say that a similar unfortunate result has happened in India on a much larger scale. Shortly before Parliament rose Lord George Hamilton, in answer to a question in the Commons, said that unfortunately some twenty deaths had occurred in India from the use of "putrid" plague serum. Later reports confirm the news, and supply the further information that the deaths were the result of lockjaw. A few days after Lord George's answer in the House a medical correspondent of the *Daily News* wrote, saying that from private information he inferred the deaths occurred from the use of serum contaminated with tetanus organisms. It seems hardly probable that Lord George Hamilton was not in possession of that specific knowledge, in which case it is hard to imagine what good end could be secured by suppressing the naked facts of this most unfortunate affair. With regard to the matter it is impossible to forget that the presence of tetanic organisms in a sterilised serum like that used against plague is entirely and absolutely preventible, both as regards the laboratory where the drug is prepared and the operator by whom it is administered. The upshot of the whole affair will undoubtedly be a sweeping reform of laboratory methods and of anti-plague serum administration. It is only by the greatest caution and vigilance that the confidence of the natives can be secured and maintained in what is the most valuable means yet discovered by the wit of man to combat a terrible zymotic malady.

HOSPITALS AND POST-MORTEM EXAMINATIONS.

The anomalous position in which hospital pathologists have been placed by the interposition of Dr. Freyberger is entering upon an acute stage. Mr. Troutbeck, the Coroner for Westminster, who has formally taken up the championship of the new departure, declares that the reform is one which has long been needed, and he denied the right of any man, however distinguished to claim to give evidence before the jury. This remark is, of course, aimed at hospital pathologists, but it is singularly inappropriate, since the appointment for which the coroner was pleading creates the very monopoly which he deprecates. A hospital pathologist is a highly qualified man with special and usually extensive experience in carrying out post-mortem examinations, and he performs his duty before a public composed of students and members of the medical staff with but one object, viz., the elucidation of the cause of death, without fear, favour or affection. But Mr. Troutbeck proceeded to give a *jugement motivé*. On the strength of a pronouncement of Dr. Freyberger's in respect of the case of a youth who had died under chloroform at St. Thomas's Hospital, the jury were persuaded to express the opinion that a better system of examining patients about to undergo an operation was necessary. As a matter of fact, the routine examination of patients seldom reveals anything which can indicate whether such patient is likely to take the anæsthetic well or not, and after reperusing Dr. Freyberger's evidence at the inquest referred to we are constrained to assert that in so far as they bear on the inadequacy of the previous examination they do not repose on any scientific basis. We are quite prepared to admit that economy is not of itself a detail worthy of consideration in view of the weighty issues at stake, and it is to be regretted that the question of cost has even been mentioned in this connection. Another argument made use of by Mr. Troutbeck was that the post-mortem examination of the person whose death was under investigation had not been thoroughly performed, in that the intestines had not been examined. This, it must be conceded, was a serious omission, especially as the examination had failed to establish the cause of death. Dr. Freyberger complained, moreover, that the tonsils, the thyroid, the thymus, and the bladder had not been examined, to which he might have added that the pineal body, the testicles, and the floor of the fourth ventricle had also escaped observation. Far from experiencing any difficulty in explaining the cause of death, he saw at once that "it was due to heart failure accelerated by acute congestion of the lungs (of which no mention has been made) and overloading of the stomach in a lymphatic subject." Nothing is easier than to "ascribe" a cause of death in the absence of precise anatomical data, but it is the merest conjecture, except, perhaps, in so far as the failure of the heart is concerned, since this is pretty constant at death. We regret that the question of the appointment of an official pathologist should have come to the front under such unpleasant circumstances. It is an innovation which we have urged for years, convinced as we are that medico-legal examinations involve issues far too grave to be confided to inadequately skilled hands. If feeling has been aroused the fault lies with the almost surreptitious way in which the appointment was made and the want of tact shown by the Coroner for Westminster in pitting the neo-pathologist against hospital pathologists of unexceptionable attainments.

THE order of the London County Council in respect of the notification of chicken-pox expires on January 6th.

Notes on Current Topics.

Hereditary Liability to Tuberculosis.

ON the heels of Koch's discovery of the tubercle bacillus there soon came the fact that tuberculosis is not an hereditary disease. But old beliefs die hard, and the assumption was made that although tubercle bacilli were not transmitted from parent to child before birth, yet there was a particular constitution running in families which had a direct liability to tuberculous infection. That is to say, the suitable soil for the growth of the disease, though not the disease itself, was supposed to be hereditary, or, as the old dictum expressed it, "we are born scrofulous—we become tuberculous." But now it seems as if even this poor substitute for a venerable dogma of the medical creed must go, for a careful investigation shows that the difference of the incidence of the disease in the offspring of tuberculous and non-tuberculous parents is very small. If this is so, keeping in view the much greater opportunity for infection afforded to the former class, it would appear that instead of having transmitted to them a tendency toward the disease, the children of tuberculous parents have in fact received a certain congenital immunity. This is the theory lately put forward by Dr. Arthur Latham, the winner of the King's Prize, and supported by some strong arguments. We know, for example, that animals can be rendered immune against some diseases, such as anthrax, and that this immunity is transmitted to the next generation. Again, when certain diseases, such as measles or syphilis, have been epidemic in a country for a long time, they get milder in type, as if the entire community had become more or less immunised, while on the other hand they are exceedingly virulent if introduced to a country where they have been hitherto unknown. Further, the blood in advanced cases of tuberculous disease gains the power of agglutinating Koch's bacilli, a property undoubtedly in some sort protective, whatever be its exact nature. It is possible that this effort may be in some cases successful, and that it may be transmitted. The subject is not only of great interest theoretically, but of much practical importance, and anything that tends to throw light on it should not be missed.

The Japanese as Sanitarians.

IT would be difficult to find a more marked example of what good sanitarians may accomplish than the present condition of the Island of Taiwan that, from being a plague-spot, has become, under Japanese rule, a sanatorium. By the treaty of Shimonoseki, in 1895, the island, which is the eastern escarpment of what was once the great Malayo-Chinese continent, became Japanese territory, and its three millions of inhabitants became subject to Japan. They were most unpromising people to deal with. On the east coast they were wreckers, while inland they cultivated rice and prepared camphor for the Chinese and European markets. Of the two millions and a half of Chinese almost all were opium eaters and smokers; the one hundred thousand Malays were known on the island as "savages." Great unclaimed marshes stretched from Mount Morrison to the lagoons at the Western shore. Malaria and dengue were endemic, dysentery was common, and in the cities Jaihoka, Jamusi and others continued fevers were ever present. Under Japanese rule the use of opium was prohibited, except as a medicinal agent prescribed by a physician. The city slums were pulled down, the narrow streets widened, every house was after a given date to be unoccupied until its sanitary arrangements were approved of by the sanitary authorities. A very excellent drainage system was made compulsory in every city, artesian wells were sunk for drinking water, and the roadways kept in good repair. In the seven years of Japanese rule mosquitos have become almost unknown, dysentery of the acute form has disappeared from the latest list of diseases; continued fever is the exception in the cities of the island. But this is not all; railways are being constructed so as to form a network over the country; telegraphic communication connects the island with China on the one hand and Honshin on the other; and, lastly free schools are established all over the country, and compulsory education is strictly enforced. In the schools every child is taught the rudiments of sanitary science. The whole rising population are indoctrinated with the belief that disease is largely due to want of cleanliness in the homes and persons of those attacked. The nearest approach to this thoroughness in enforcing sanitary laws occurred under the able administration of General Woods, U.S.A., when he was placed in charge of Cuba after the Spanish War of 1894. In both cases disease was driven out by application of sanitary laws.

Locomotor Ataxy.

THE treatment of locomotor ataxy by the internal administration of medicines is, unfortunately, seldom followed by good results. The failure has been confessed both at the Surgical Congress of Moscow and at the Twelfth Berlin Congress. Hydrotherapy and massage have not realised all that was hoped for from them in this disease; but Anders Wide, of Stockholm, asserts that the ordinary methods of massage are useless in the treatment, and he lays down a special code of directions, such as are followed in the medical gymnasium of Sweden, under his care. Placing the patient on a stone or strong wooden couch the masseur commences by circumducting, flexing, and extending the limbs. The patient is then placed astride the couch, as if on horseback, and circumduction of the trunk is practised; this is followed by placing the patient on his face, in an extended position, and pressing and percussing his spinal nerves. It is unnecessary to enumerate the different processes, suffice it to say that Wide looks on the rigidity of the muscles and the pains that are so characteristic of the disease as due to a toxin, and that the poison is eliminated by a systematic, properly-conducted massage of the whole body. Zablindowski reports most favourably of the method, and quotes cases in which the power of locomotion without any aid was restored. Rigidity disappeared and sensation returned. Muscle tissue recovered its tonicity, and the girdle and lightning pains ceased. Yet even better results are obtained when, as M. Konindjy points out, massage is associated with gymnastic exercises calculated to educate muscular co-ordination, to group muscles to act harmoniously, as is done when by accident the right hand is lost and the sufferer educates his left hand to perform the duties formerly done by its fellow. At home, Aethus and Granville more than twenty years ago recommended massage as a treatment for tabes dorsalis, but the practice was in time discontinued. We think that the combination of the methods of massage and educational gymnastic exercises offers such a hopeful prospect for the victims of the disease that it should be more generally adopted. It is a treatment based on sound scientific principles.

The New Inebriates Act.

THE provisions of the Inebriates Act, which come into action with the commencement of the New Year, can hardly fail to have a far-reaching effect upon the liquor trade. They affect profoundly the relations of the police and of the publican to the drunkard. A police-constable will henceforth have the right to search any part of a publican's premises if he has reason to suspect that they harbour a drunken person. The police have also largely increased powers with regard to the control of inebriates. One reform is likely to be of considerable service, namely, that which increases the responsibility of the publican for drunkenness upon his premises. At present the holder of a license cannot be convicted unless it be proved that any person found drunk reached that condition through carelessness or connivance on the part of himself or his servants. The recent Act, however, is far more stringent, and provides that "where a licensed person is charged with permitting drunkenness on his premises, and it is proved that any person was drunk on his premises, it shall be with the licensed person to prove that he and the persons employed by him took all reasonable steps for preventing drunkenness upon his premises." The new Act certainly registers the greatest step towards the legislative control of the liquor trade that has been taken for many years. It is to be hoped that drastic legislation will be followed by energetic administration.

The Administration of Anæsthetics.

CATASTROPHES resulting from the employment of anæsthetics are likely to receive closer scrutiny in the near future than they have received in the past, from the point of view of the responsibility of the administrator, so that the subject merits our attention. Deaths occurring under chloroform or other anæsthetic may be distributed in several groups. First, there are the cases in which the anæsthetic is blamed in the absence of other discoverable cause of death, and these are of necessity very frequent. Secondly, there are cases in which the action of the anæsthetic on organs already diseased unquestionably precipitates the fatal termination. In chronic disease of the lungs or kidneys, in diabetes, in the obese, and in operations on the mouth, larynx and brain, the employment of chloroform or ether may turn the scale against the patient, and when existence of disease is known beforehand the administration of oxygen in combination with either chloroform or ether may avert otherwise inevitable death. There is a third class, the importance whereof it is naturally difficult to ascertain, in which death is due to improper administration or to overdose of the anæsthetic. These cases belong to the strictly preventible deaths, and ought never to occur; but so long as anæsthetics are given by men who have received no special training, and who have had little or no practical experience, they will continue to happen. Nor can they be prevented by any hard and fast regulation, seeing that, in country practice at all events, it is often necessary to administer an anæsthetic under circumstances which preclude the employment of a professional anæsthetist.

Typhoid and Appendicitis.

Although M Dieulafoy has laid down the dogma that no one should ever die of appendicitis, and his opinion on this head has been subscribed to by many other experienced clinical observers, the occasional exception, which some may say but proves the rule, is sometimes presented in a very emphatic form. In a recent clinical lecture, M. Rendu, of the Necker Hospital, brought before his audience an interesting example of complex diagnosis in this connection. A vigorous-looking woman of twenty-nine was admitted, who had been suffering from severe headache for fifteen days. There was general malaise, with anorexia, constipation, and a general sense of weight and discomfort all over the abdomen, but not definitely localised. For some days there had been a well-marked evening rise of temperature. Deep-seated pressure in the right groin caused pain, and an almond-sized swelling was found in the broad ligament. The cervix uteri was also enlarged. A diagnosis of salpingitis was accordingly made. The patient improved under treatment, and at the end of twelve days was considered well enough to leave the hospital. She then suddenly developed a violent rigor, with severe headache and rapid elevation of temperature (to 39·6° C.), but there was no vomiting, nor abdominal pain, nor tympanites. On the following day there was marked pain at McBurney's point, but very little muscular tension. Diagnosis of appendicitis was then made. As the patient grew worse, operation was decided on—four days later. The appendix was very much congested, and contained a blood-clot, but there was no peritonitis and no adhesions. Six days later she died. On the day before death, Widal's reaction gave a positive result; but till the post-mortem examination the diagnosis of typhoid was not definitely concluded. Then the intestinal lesions were found to be perfectly characteristic. Still, the union at the seat of operation had been perfected by first intention.

Local Journalism and Local Practitioners.

The undesirability is generally recognised of anything that savours of the advertisement of medical men in lay newspapers. In spite of that unwritten law, however, the growth of the "puff oblique" goes on apace, if we may judge by the unceasing stream of complaints that flows through the correspondence columns of the medical journals. Our attention has been in that way drawn to a recent copy of the *Bournemouth Graphic*, an illustrated newspaper which displays the energy of exuberant youth in its editorial functions. One of its features has been the publication of the photographs, together with descriptive interview or notice, of all Bournemouth medical practitioners who are the fortunate owners of motor-cars. One medical man is reported to have made a sage remark to the effect that motor-cars, like human beings, were apt to get disorganised now and then, and that two of his own vehicles were at that moment under the motor doctor's hands. The artistic possibilities of this form of notice are apparently as varied as they are objectionable. A vigorous protest on the part of the local medical society would probably have a beneficial effect in protecting medical men from such gratuitous annoyance.

Appendicular Actinomycosis.

In August last, M. Poncet recorded a case of actinomycosis of the vermiform appendix, and another case of this very rare condition was published by Dr. Leon Thevenot (of the University of Lyons) on November 18th. The patient had been for some time employed as a stable-boy in an hotel, and had previously been a farm labourer. He had been the subject of hydrarthrosis of the right knee-joint at the age of fifteen, but had made a rapid and complete recovery under treatment. He had lost three or four molar teeth during the past three years, from caries. He had long been in the habit of chewing blades of grass, grains of wheat, &c., when not quite ripe. His symptoms dated from May 1st, when he began to suffer from acute pain in the right iliac fossa. There were recurring rigors, frequent nausea, and progressive malaise and debility. The temperature was elevated (38°-39° C.). He went into hospital at Belleville, where his symptoms improved under treatment by rest, careful diet, and inguinal compresses moistened with laudanum. He was then sent on to the Lyons Hospital (L'Hôtel Dieu). There was then no inguinal pain; but he suffered from lassitude and persistent anorexia—with slight constipation. There was little emaciation. There was no pain at McBurney's point. A small tumour was found above Poupart's ligament on the right side. It was of about three or four fingers' breadth—in vertical direction, and was very hard. The diagnosis of appendicitis—probably of the nature of actinomycosis—was then made; and the operation of removal of the affected organ was successfully carried out. A good recovery followed. Although the condition is relatively so rare, Hinglais was able to collect 120 cases in the thesis which he published on this subject in 1897. Since then nearly thirty others have been recorded.

Intra-spinal Cocainisation.

THE intra-spinal use of cocaine for the production of analgesia has been known since 1884, but up to quite recently it has only been used for operations on the lower limbs and lower parts of the body. While local analgesia of this kind possesses many advantages over general anæsthesia, our experience of cocaine has not yet been sufficient to establish its uniform safety; and some of the after-effects have occasionally been very troublesome. Mr. Morton, of San Francisco, however, has recently published his experience of 643 cases (*Journal of the American Medical Association*, November 8th) without a single failure. He has also enlarged the sphere of its use by showing that the analgesia extends not only to the legs, but also to the arms and upper parts of the body. For instance, he has amputated the arm and fingers five times, has trephined five times, and has removed tumours of the face seven times, by the help of spinal cocainisation. His method is in all cases to dissolve the cocain hydrochlorate (0·3 to 0·5 of a grain) directly in the cerebro-spinal fluid, by allowing the latter to run into the syringe. He believes that by this means better diffusion is obtained, and there is less chance of failure. The injection is made in the third lumbar interspace. Analgesia of the lower part of the body is complete in from three to five minutes, and in the upper from fifteen to twenty-five; it lasts from one to five hours. None of the cerebro-spinal fluid should be allowed to escape.

Coroners' Courts and Hospital Consultants.

OUR attention has been drawn by a correspondent —whose letter is printed in another column—to the extraordinary attitude of one of the honorary surgeons of a London hospital. The gentleman in question, in giving evidence before the Coroner's Court as to a person who died under an anæsthetic, protested in emphatic terms against his being called as a witness. His statement that his time was valuable and that he was losing a great deal of money by attendance at court was probably made in the heat of the moment and need not be seriously considered. His general attitude, however, demands more consideration. It cannot be too clearly understood that any member of the medical profession appointed to an honorary position on the staff of a public charity must accept its accompanying responsibilities. In more than one case mentioned by our correspondent, members of the honorary staff have ignored the coroner's summons and sent in their stead a resident medical officer. In case of a summons it would be well for the honorary surgeon or physician to communicate with the coroner, who would then be enabled to judge whether it would be desirable to dispense with the evidence of the former. It is hardly needful to point out that anyone wilfully disregarding the summons of a court of law is placing himself in a false position which might entail consequences of an extremely unpleasant nature. In the particular instance of deaths under anæsthesia it is desirable that the highest skilled testimony should be available, and, for that matter, in many other cases as well. On the whole it is not improbable that a mere hint will suffice to prevent future complications of the kind suggested by our correspondent.

Electrocution in a Public Bath.

LAST week the dangers of electric lighting were illustrated by a most deplorable accident in a London public bath. The attendants at the institution in question were attracted by the cries of one of the bathers, and on going to the spot found him in an agony of pain and suffering from shock, which shortly afterwards proved fatal. Another man was found dead in an adjoining bath. The cause of death in both instances appears to have been electrical shock. Pending an official inquiry into the occurrence, the probable explanation is that the baths became connected in some way with the wires conveying the current for lighting purposes. It is difficult to imagine any other way in which a powerful electrical discharge could have reached the bath. The incident should attract the attention of all responsible for baths, both public and private, in every part of the United Kingdom. If the use of electrical lamps is to involve the risk of electrocution, then the public will undoubtedly prefer the substitution of less dangerous illuminants.

The Results of Milk Inspection in America

The Medical Society of the County of Albany have lately discharged a most important public work in appointing a committee to examine bacteriologically samples of milk taken from the numerous milk dealers of Albany County. The results thus obtained show the extreme need which exists for regular supervision in the case of the milk supply of a country. Sixty-five specimens in all were examined, and of these nine contained pus, while in at least one the sediment showed streptococci and staphylococci in abundance. Some of the specimens contained 3,000,000 bacteria per c.c., while one in particular contained nearly 10,000,000 bacteria per c.c. In some cases, on the other hand, the count of bacteria yielded results which suggested the use of preservatives. As Supporting clinical proof of the impurity of the milk supply comes the fact that, although the past summer was not so hot as usual, the number of deaths reported as being due to diarrhœa was greater. It appears from the report of the committee that dealers attempt to sell what presumably is by courtesy termed milk at six cents per quart, while, according to the opinion of the committee, it is impossible to sell the pure article at such a price. The question of impurity in the milk supply, even though in this case the facts relate to America, is of considerable practical interest to medical men in the United Kingdom. There can be no doubt that an enormous amount of loss of infant life, and permanent bad after effects in the case of those who survive, is caused by the present system of milk supply. Some time or other local authorities will have to tackle the question of the provision of a proper supply, and with a view to its solution, every item regarding the milk supply of other countries will be of value.

"Favourable Results."

A CYNICAL critic observes that we hear far too much of "favourable results," both in medicine and surgery. Literature is full of the records of cases which have terminated in favourable results, and their prevalence is such as to give rise to an uneasy suspicion that we are not reading the annals of medicine but merely the annals of somebody's. successes. The object of medical literature is, or should be, the generalisation of useful knowledge and it would be absurd to pretend that "favourable results" alone convey all knowledge worth having. On the contrary, the wise man, it has often been observed, learns more from his failures than from his successes. Medical pictures should not be monochromes, for these fail to give prominence to possibly important details. To say that medical men, being men, are more prone to publish their successful, rather than their unsuccessful, cases is an explanation and not a justification of the practice. The experience of others may be useful to the practitioner, provided always that it be fairly and honestly conveyed, and o be honest it must be complete.

Plague in California.

VERY great indignation is felt throughout the United States of America at the determined manner in which the presence of plague in San Francisco has been denied by the State and City Health authorities, and their equally determined policy of inertia. Plague is known to have occurred in the city as long ago as March 1900, from which time to the present there is no reason to believe it has ever disappeared. In spite of the absolute suppressions of facts by the local authorities, as many as thirty cases are known to have occurred in the three months July to October of this year, and the real number is probably much greater. Governor Gage, the Governor of the State, has been foremost in the policy of denial, and has actually succeeded in obtaining the removal of Surgeons Kinyoun and White of the United States Marine Hospital Service who had shown a proper zeal in their endeavour to cope with the disease, while two bacteriologists were dismissed by the State Board of Health for making a positive diagnosis of plague in cases submitted to them for examination. A bill was introduced to the legislature by the Secretary of the State Board of Health, making it a felony to print or publish or to make in writing a report of plague or cholera before a public announcement had been made by the State Board. It is noteworthy that as long ago as 1900 Surgeon Kinyoun was offered by six Chinese companies a bribe of 40,000 dollars to suppress the facts: and there is reasonable ground for supposing that others have been less scrupulous than he. It is hardly to be wondered at that the delegates of the State and provincial Boards of Health of North America recently assembled at New Haven, in view of the history of the epidemic, as far as it was possible to discover it, should have decided on requesting the Surgeon-General of the United States Marine Hospital Service to summon a national conference to put an end to the scandal in California.

Chauvinism in Medicine.

IN our reviews of books both English and foreign our readers must frequently have observed the stress we have had to lay on the ignorance commonly shown by authors of previous work done in their particular subject in any country but their own. This ignorance in many cases is due to simple indolence, but is sometimes, it is to be feared, a deliberate act connected in some way with perverted ideas of patriotism. A painful example of this occurred the other day when two rival schools of Tropical Medicine amused the readers of the medical papers by their controversy as to the original discoverer of a quite unimportant parasite, the truth being that the credit belonged to neither of them, but to a foreign observer. Again, we have noticed that in the publications of certain schools, reference to any work done elsewhere is often entirely lacking. In view of such a condition of affairs, the thanks of all disinterested people are due to Professor Osler for his courageous and frank address with the above title to the Canadian Medical Association. With that eloquence which belongs but to few, he shows that science is one, and not the property of any nation; that her cult is not narrow, and that nationalism, provincialism, and parochialism are hindrances, not helps, to her worship.

The Influence of Treatment on the Tertiary Stage of Syphilis.

IT is generally believed that the liability to severe tertiary symptoms after an attack of syphilis is greatly modified by adequate mercurial treatment during the primary stage. That this should be the case is only what one would expect in view of the remarkable influence of the treatment on the earlier manifestations, but statistical evidence of the fact must necessarily be extremely difficult to procure, especially as other factors, such as alcoholism, undernutrition, and a weakly constitution, probably exert an influence on the production of these later lesions. Dr. Weber, of Berne, has tabulated the statistics of 185 cases of tertiary syphilis in hospital patients and 49 in private practice. Of the former class 77·3, and 40 8 of the latter had not undergone any treatment. Investigating cases of syphilis from another point of view he found that 51, or 34·7 per cent., of 147 private patients at all stages of the disease, who had undergone either an inadequate course of treatment, or none at all, developed tertiary symptoms, while only 13, or 5 per cent., of 261 patients who had undergone more than one course of treatment suffered in this way. There is consequently a marked difference between the two classes of cases, a difference which, allowing for the influence of other factors, militates strongly in favour of the effect of proper treatment in averting the later manifestations of syphilis.

Medical Practice in Spain.

Since 1868, foreign practitioners desirous of exercising their calling in Spain have been accorded very great facilities, the recognition of equivalence and the grant of the right to practise having been left in the hands of the medical faculties. This latitude, it seems, has given rise to considerable abuse, at any rate that is the reason alleged by the Government for withdrawing the right of granting dispensations and permits from the universities and vesting them *de novo* in the State. All existing licences to practise granted to persons not possessed of a Spanish diploma will be held to have expired six years hence, dating from November 9th, 1902. In future, only temporary permits will be conceded, and these only at the instance of the Government and with the approval of the General Council of Education.

The Lord Lieutenant of Ireland has intimated his intention of conferring the honour of Knighthood upon Mr. Charles B. Ball, M.D., who, it will be remembered, successfully operated upon Lady Dudley when she was suffering from appendicitis.

Correspondence.

[We do not hold ourselves responsible for the opinions of correspondents].

CORONERS' COURTS AND MEDICAL EVIDENCE.

To the Editor of The Medical Press and Circular.

Sir,—The attention of members of the honorary medical staffs of hospitals may well be drawn to the necessity of their attendance when called to give evidence at inquests. Recently several instances have come under my notice where honorary surgeons have actually ignored the summons to attend an inquiry into the cause of death of a hospital patient. Their evidence was required in deaths under anæsthetics, a class of case in which clearly the public has the right to demand the most skilled evidence that can be procured. In one such inquiry a well-known hospital surgeon protested against his being called as a witness. He said that his attendance caused him *the greatest inconvenience and a considerable loss of fees*, as if public duty did not lay a similar tax upon the resources of the ordinary citizen. At the same time, he was compelled to admit that the deceased patient died whilst undergoing an operation at his hands. He contended, however, that a house surgeon could have given all the necessary evidence. The sooner the minds of honorary hospital surgeons and physicians are disabused of that kind of arrogance the better for the community. The humanity and general good sense of the gentlemen in question is universally recognised, and it would be a thousand pities were they to be marred by want of a little timely consideration.

I am, Sir, yours truly,
General Practitioner.

OBSTRUCTIVE DYSMENORRHŒA.

To the Editor of The Medical Press and Circular.

Sir.—I am obliged to Dr. Herman for his notice of my remarks on above subject in The Medical Press of December 10th, and for his reply to my question.

I am, however, surprised that he did not publish the effects obtained in the one case of dilatation which he is evidently surprised at ("lasting for over twenty years"), in his paper in the *British Medical Journal*.

Most gynæcologists have met with one case of the kind; one case proves nothing. What about the lasting effect in the other cases treated?

Dr. Herman's sweeping condemnation of all stems is, I am glad to say, not shared in by most gynæcologists. There are stems and stems, and his statement that "many deaths have been caused by them" needs confirmation. Again, Dr. Herman states "no one has yet published a plain account of a series of cases treated with intra-uterine stems; then may I ask on what grounds he makes the previous statement quoted, "Many deaths, &c."? My stem differs entirely from those "in use for half a century" (wonder is they still survive!).

Mine are flexible, the old form rigid; mine are hollow, the old form solid; they were not self-retaining, mine are; they are shorter than uterus, the old form often were too long. They are hinged at base, and, with the flexibility combined, yield to every movement of uterus, and I have had no deaths or chronic invalids as a result of their use—now extending over ten years.

I also think I have had quite sufficient experience to diagnose endometritis from " " Whites " (vaginal leucorrhœa).

The intra-uterine stems he alludes to were not of my design; he has never tried them, and yet includes them in the universal condemnation! Is it fair to condemn what has not been tried?

If Dr. Herman knows "that an intra-uterine stem is an efficient cause of endometritis," I hope the information is not second-hand. As I have found my stems not only cure the endometritis but the dysmenorrhœa as well owing to their action as drainage tubes.

Dr. Herman's statement that divaricating dilators "tear instead of stretching" depends altogether on who uses the dilator, and is probably founded on his own unfortunate experience, for the same reason that "a burnt child dreads the fire, 'therefore' he uses them not"

Dr. Herman's argument "that what we want is not new instruments" or new drugs (Sydenham), would imply a perfect knowledge of those at his disposal, and on the same principle we want no motor-cars or locomotive engines, the stage coach or omnibus (properly driven) being good enough.

I am, Sir, yours truly,
Alexander Duke.

London, W., December 29th, 1902.

Literature.

POLITZER'S TEXT-BOOK OF EAR DISEASES. (a)

It is eight years since the last edition of this widely known work on Diseases of the Ear appeared. Since then many important additions, pathological and clinical, have been made in otological science. That these advances have been fairly noted in the comprehensive volume before us is evidenced by the fact that the older edition has been increased by over one hundred very closely printed pages. The whole work bears evidence of complete revision, and those departments of otology in which the greatest study has been made, are in great measure rewritten. The translation of the veteran otologist's manuscript has been carried out by Drs. Milton Ballin and Clarence Heller, to whom the author pays the merited compliment of saying that "the book does not read like a translation, but more like an original work." He adds that they have done the difficult task "splendidly." English readers will endorse this approval, for we have seldom seen a translation from the German which betrays fewer traces of the translators' difficulties than this does. This may partly be explained by the fact that the translation was carried out in Vienna under the direct personal supervision of the author. And it would be ungenerous not to acknowledge here, as the translators do, how faithfully Mr. Charles L. Taylor (London) has dealt with the not least important part of a translation, viz., the supervision of the pages in their passage through the Press.

(a) "A Text-Book of the Diseases of the Ear." By Professor Dr. Adam Politzer, of Vienna. Translated and Edited by Milton Ballin, Ph.D., M.D. and Clarence L. Heller, M.D Fourth Edition revised and enlarged. 884 Pp. 346 illustrations. Price 25s. London. Bailliere, Tindall, and Cox. 1902.

In the short space at our disposal we can only refer generally to the work, which covers not only the whole field of practical otology, but comprises also a complete description, in the fullest sense of the word, of the anatomy and physiology of the ear. Many of the excellent original drawings which illustrate the latter portions of the book are already well known. We suppose that there is no living otologist who can draw on such rich and almost inexhaustible material as Professor Politzer, as those who have seen his private collection of preparations, anatomical and pathological, will understand. Sixty pages at the commencement of the work are devoted to the anatomy and physiology of the external and middle ear, and later on, before discussing the diseases of the internal ear, twenty-eight pages are given up to the "Anatomy and Physiology of the sound-receiving apparatus." Ninety-four pages are devoted to methods of examination, with general remarks on treatment, and a full analysis of the various modes of testing the hearing. We miss here a description of Edelmann's Galton-pipe, which is the most perfect instrument for registering the vibrations of high tones, enabling us with perfect accuracy to differentiate and determine the hearing power in both ears for these. In sixty-six pages the affections of the external ear are dealt with, while 429 are absorbed by the diseases of the middle ear, including all the secondary mastoid, cranial, and intra-cranial complications of its suppurative states.

It is to this part of the work that the aural specialist and the general surgeon will turn with the greatest interest, and we are bound to say that it is here the fullest reward will be found. Clearly and lucidly are all the most recent advances in our knowledge of the pathological sequences of middle-ear disease discussed, and the advantages relatively of the various operative procedures proposed for their relief pointed out, while the operative steps are lucidly explained in detail. This section is the most striking portion of the new edition. On pages 535-538 are categorically set out the various objective and subjective signs and symptoms which indicate the necessity for a radical operation in chronic, persistent, middle-ear suppuration. This summary, coming from such an authoritative source and from such a school as Vienna, is worthy of the most thoughtful perusal of every otologist and practitioner who bears the responsibility of the conduct of a case of obstinate suppurative middle-ear inflammation with its varying complications. These are the questions many able surgeons are asking: Are the number of radical operations we now read and hear of justified by the urgency or severity of the symptoms? Are the ultimate and permanent results exactly recorded? Are the disadvantages of the radical treatment fairly balanced side by side with the advantages of careful, methodical, and sustained curative and conservative methods? Are the vaunted "cures" in a considerable proportion of radical operations (*sic*) unsatisfactory, followed by deterioration of hearing, continued discharge, some facial paralysis, or a protracted convalescence, and often necessitating a second grafting or other operation? The boom of "radical" operations has been so great that no young otologist considers himself worthy of the name if he cannot boast of having performed some hundreds of these, and his prowess is further shown by the exhibition of an internal ear which his zeal has prompted him to remove. There is no question of the justification for these operations under certain circumstances, in the face of symptoms which call for urgency, or when the chronicity of the disease and the pathological signs demand them. But we have serious misgivings whether by this comparatively recent departure in the therapeutics of otology we are not being led away from safer and sounder methods of treatment, though perchance not as showy or gratifying to the ambitious surgeon. We are not alone in this view, and very much doubt if the pendulum will not swing in the other direction before long, and the number of "radical" operations become increasingly less. Professor Politzer's conclusions on this subject are worthy of notice

He says:—"In all cases of persistent middle ear suppuration in which the objective and subjective symptoms, so paramount for the operation, are lacking, we must confine ourselves to the conservative treatment, and in cases in which the indications are not urgent, an endeavour should always be made to control the suppuration by a thorough local treatment before deciding upon operative procedures."

We most cordially endorse these prudent reservations of the author. Of the remaining chapters of this exhaustive treatise, seventy-seven pages are occupied by a discussion of the diseases of the naso-pharynx and the accessory sinuses of the nose, with reference to diseases of the middle ear. This includes the treatment of adenoid vegetations.

Diseases of the internal ear, which are most thoroughly dealt with, and such practical questions as signal deafness in railway employeés, malingering, cerebral disturbances of hearing, malformations, and deaf mutism, complete this most valuable addition to otological literature, which, although primarily intended for the special surgeon rather than the practitioner, no otological specialist's library can be complete without this comprehensive compendium contributed by a master hand.

A MANUAL OF MEDICAL TREATMENT. (a)

The first edition of this most valuable book made its appearance in 1893. Who can refrain from pitying an author who conscientiously tries to weigh the relative merits and estimate the utility of the thousands of therapeutic agents invented since that date? Dr. Burney Yeo, in this new and revised edition of his manual, has saved himself much trouble by strictly adhering to clinical therapeutics, merely giving his readers the benefit of his own large clinical experience, and that of equally respectable authorities. For this reason the book is an eminently practical one, all theoretical discussions concerning the chemical constitution and physiological action of drugs being left severely alone. It is a book from which the most skilled therapeutist has something to learn, a book which the more ordinary physician, no matter how frequent his appeals to it, will surely find a true guide, philosopher, and friend. One thought at the time that improvement on the first edition would be next to impossible. Success, however, is a wonderful stimulant to an author, hence we have a thoroughly revised, extended, and modernised edition of the "Manual of Medical Therapeutics" which is likely to remain, for some time to come, the standard work on the subject in the English language. We feel at liberty to give the book unqualified praise, and almost constrained, not only to recommend it, but also to urge it upon all who do not possess it, yet are ambitious of becoming polished practical physicians.

(a) "A Manual of Medical Treatment." By J. Burney Yeo, M.D., F.R.C.P., Emeritus Professor of Medicine in King's College, London; Consulting Physician to King's College Hospital; Hon. Fellow of King's College, formerly Professor of the Principles and Practice of Medicine and of Clinical Therapeutics in King's College, and Examiner in Medicine at the Royal College of Physicians. Author of "Food in Health and Disease," &c., &c. New and Revised Edition. 1902. Vol. I., pp. 696. Vol. II., pp. 818. Two Vols., price 21s. London: Cassell and Company, Ltd.

THE PRACTITIONER'S GUIDE. (*a*)

This book, from many points of view, is truly useful as a practitioner's guide. It is arranged in dictionary form, so that reference is easy. In addition a careful index has been compiled, which further facilitates reference by giving the synonyms of the subjects arranged in alphabetical order in the text. The chief claim of this work to the name "guide" is undoubtedly the concise, practical, and intelligible manner in which the subjects are treated, more particularly concerning differential diagnosis and treatment. It embraces all the subjects that any general practitioner requires to know except midwifery, which the authors consider so important that they realised the hopelessness of attempting to deal with it efficiently while keeping the volume of convenient size. Tropical diseases are most admirably done, with all due consideration to modern discoveries. Surgical operations are not described, other than those which may, with propriety, be undertaken by the general practitioner. Gynæcology receives a lion's share of attention, yet, considering the amount of information imparted, the subject is handled with masterful brevity. The general medicine and surgery is good, concise and practical.

We have no hesitation whatever in recommending "The Practitioners' Guide" to those for whom it was intended. No general practitioner need feel ashamed of the stock of medical knowledge he could readily acquire were he merely to read the pithy accounts in this book of the diseases which come under his notice. The publishers are to be congratulated on the appearance, printing, and binding of the volume.

Literary Notes and Gossip.

The January number of the *Westminster Review* contains, among a number of good articles, a remarkable one on "Insanity." The facts herein grouped, although frequently commented on in our reviews of asylum work, are so appalling when brought together in a collected form, that they will naturally suggest to the reader whether something cannot be done to arrest the spread of the disease. The special feature of the *Review*, viz., the sections on Contemporary Literature, including those on Science, Philosophy, Belles Lettres, &c., are well worth reading.

⁂

The "Reuben Harvey" Memorial Prize, which is given triennially by the Royal Colleges of Physicians and Surgeons of Ireland for the best essay on some subject evidencing original research in animal physiology and pathology, will be awarded on July 1st, 1903. The prize consists of £25, and the competition is open to all students of medical schools recognised by the Colleges, and also to all licentiates and graduates of not more than three years' standing. The competing essays must be lodged with either of the Registrars of the Colleges before June 1st, 1903.

⁂

This "Life of St. Luke," by Edward Clapton, M.D. (Churchill), is written in a simple but intelligent way. This life of the beloved physician will be interesting to all, but especially to the medical world. It brings out in a striking way the force, the sweetness, the refined intellectuality of him who, next to the Great Physician, must ever rank as the noblest of his class. So little is known about this great apostle that it is interesting to have all the details obtainable, both from the Bible and elsewhere, collected together, and put into readable form, and it is of particular value and interest, since the collection is made by one who is himself a physician. It may be recommended to all who wish to know more of the life and work of St. Luke.

⁂

Who's Who for 1903 has made its appearance with the punctuality characteristic of the best class of annuals to which this undoubtedly belongs; and from a casual reference to pages here and there, the publishers, Messrs. A. and C. Black, appear to have done the revision and additions with great accuracy. Many of the biographies are interesting reading, albeit those of leading members of the medical profession may provoke comment. Of course the work is not a directory in any sense. To take it out of this category, no addresses are given. It is simply what its title expresses, and as such is probably unique. The same publishers have sent us also "The Englishwoman's Year-book" for 1903, which might be aptly described as an educational, professional, and industrial guide for girls and women, and as such will be found useful to the large number who are always seeking for hints or guidance.

⁂

Those of our readers who are interested in asylum work may remember a small magazine which made its appearance a few years ago with the title of "Loose Leaves," under the editorship of the late Mr. Hyslop, its contributors being the staff and patients of the Church Stretton Private Lunatic Asylum. It was a bright, merry little publication, full of quips and moonstruck foibles for "laughter of the gods." With the death of its founder the magazine ceased to appear, but has started afresh this week, its writers "gloating in their literary and legal irresponsibility" in the same amusing and fantastic fashion as of yore. The editor invites contributions from outsiders, who need not be responsible for their opinions or their grammar, and we join him in wishing that this little effort to direct and divert the minds of asylum patients may have a long and prosperous career.

⁂

It is interesting to note how often in recent biographies and "reminiscences" references to medical men occupy a prominent place. This is conspicuous in the most charming "Random Reminiscences" of Mr. Charles H. E. Brookfield, recently published. On one occasion the author got into a railway carriage at Southampton, in which was seated Sir William Jenner, returning from a visit to Osborne, and the latter described how once in student days he started to go to the pit of the old Haymarket Theatre in order to get a glimpse of the Queen and the Prince Consort. The crush was immense, and in the struggle Jenner's coat was torn in twain from tails to the collar. Returning home in high dudgeon the sufferer exclaimed to himself, "I'm d——d if I'll ever go and see the Queen again." "Which only shows," added Sir William with a humorous twinkle, "that one ought not to speak without knowing."

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DIARIES AND ALMANACS.

The appearance of that hardy annual, "Whitaker's Almanack for 1903," bids us prepare to take leave of 1902. Every precaution has been taken to avert the obesity which is the curse of old age—in works of reference as in human beings—and although the present volume is decidedly portly compared with its inaugural issue, it is within becoming limits. There are signs, too, that it has attained what we may call its "physiological weight," for the annual increment for some years past has been extremely moderate—this year only six-

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(*a*) "The Practitioner's Guide.' By J. Walter Carr, M.D.Lond., F.R.C.P., Physician to Royal Free Hospital, Physician to Victoria Hospital for Children, Joint Lecturer on Medicine London (Royal Free Hospital) School of Medicine for Women; T. Pickering Pick, F.R.C.S., Consulting Surgeon to St. George's Hospital and Victoria Hospital for Children; Alban H. G. Doran, F.R.C.S., Surgeon to the Samaritan Free Hospital; Andrew Duncan, M.D., B.S.Lond., F.R.C.S., M.R.C.P., Physician Branch Hospital Seamen's Hospital Society, Joint Lecturer on Tropical Medicine at London School of Tropical Medicine, Physician Westminster Dispensary, Fellow of King's College, London. In one Vol. Pages 1,106. London: Longmans, Green and Co.

teen pages—which is almost a *quantite negligeable* in a volume of close upon 800 pages. The promotions and appointments gazetted during the year in connection with the war and the Coronation occupy a large share of the extra space, and much revision has been necessitated by the "linking up of the Empire." Valuable chapters are devoted to such current topics as the Education Bill, the Temperance Problem, Wireless Telegraphy, &c. In short, the volume for 1903 displays the same enterprise and accuracy which have gained for it public favour in the past.

"Knowledge Diary and Scientific Handbook for 1903" should find a welcome among many medical men who do not confine their scientific pursuits merely to professional purposes. In addition to a plentiful diary allowance of space, a page being granted for each day, there is much miscellaneous information peculiarly useful to scientific men. There are also original descriptive articles on the spectroscope, the choice of a microscope, observation of variable stars, meteorological observations and monthly astronomical ephemera. The paths of the principal planets for the year are well illustrated with charts, and twelve star maps show the night sky for every month in the year with descriptions of the visible constellations and principal stars. There are also many useful tables of reference dealing with matters of Imperial interest and lists of the principal scientific and learned societies and principal London clubs. The work reflects high credit on all concerned in its production. We strongly commend this diary to our readers, and especially to those interested in astronomy.

THE MEDICAL DIRECTORY FOR 1903.

The New Medical Directory has been issued with commendable punctuality, that for the New Year being already in our hands. Those who have been accustomed in past years to refer to the bulky volume, which annually increased in unwieldiness, will scarcely recognise the new comer. The publishers (Messrs J. and A. Churchill) appear to have recast the entire production, and although it may not commend itself to the conservative tendencies of everyone, we consider the alterations are decided improvements, and that as a work of reference it will be found much more convenient. The change which will attract most attention is the increased size of the page from a demy to a royal octavo, which materially reduces the thickness of the volume, and enables one to keep it open at any given page more readily. The typography and binding have also been improved, and we congratulate the publishers on their enterprise.

NEW BOOKS AND NEW EDITIONS.

The following have been received since the publication of our last list:—

Baillière, Tindall and Cox (London).

Points of Practical Interest in Gynæcology. By H. Macnaughton-Jones, M.D., M.Ch., Q.U.I. Third Edition with 24 plates. Pp. 188. 4s. 6d. net.

Aids to Gynæcology. By Alfred S. Gubb, M.D. (Paris), M.R.C.S.Eng. Fourth Edition. Pp. 136. Price 2s. 6d.

Aids to Forensic Medicine and Toxicology. By William Murrell, M.D., F.R.C.P. Sixth Edition. Price 2s. 6d.

Modern Microscopy. By M. J. Cross and Martin J. Cole. Third Edition. Pp. 292. Price 4s. net.

Constipation. By Sherman Bigg, F.R.C.S.E. Pp. 67. Crown 8vo. Price 2s. 6d. net.

A. and C. Black (London).

Who's Who, 1903. An Annual Biographical Dictionary. Pp. 1532. Price 5s. net.

The Englishwoman's Year Book and Directory. 1903. Edited by Emil Janes. Pp. 340. Price 2s. 6d. net.

J. and A. Churchill (London).

Second Treatise on the Effects of Borax and Boric Acid on the Human System. By Dr. Oscar Liebriech. Pp. 87. Price 2s. 6d.

Cancer and other Tumours of the Stomach. By Samuel Fenwick, M.D., L.R.C.P., and W. Soltau Fenwick, M.D.Lond., M.R.C.P. Pp. 362. Price 10s. 6d.

Reports of the Society for the Study of Diseases in Children Vol. II., season of 1901-1902. Edited by George Carpenter. M.D. Pp. 310. Price 12s. 6d.

Year-Book of Pharmacy and Transactions of the Brit. Pharm. Conf. 1902. Pp. 566.

H. K. Lewis (London).

The Etiology of Typhoid Fever and its Prevention; being the Milroy Lectures delivered at the Royal College of Physicians in 1902. By W. H. Corfield, M.A., M.D. Oxon. Pp. 159. Price 2s. 6d.

The Office of the "Mark Lane Express" (London).

The Agricultural Annual and Mark Lane Express Almanac, 1903. Pp. 184. Price 6d.

W. B. Saunders and Co. (Philadelphia and London).

Atlas and Epitome of Traumatic Fractures and Dislocations By Prof D. H. Helferich. Edited by Joseph C. Bloodgood M.D Fifth Edition, revised and enlarged. Illustrated. Pp. 353. Price 13s. net.

Treatment of Fractures. By Charles L. Scudder, M.D. Third Editon. Illustrated. Pp. 450. Price 19s. net.

A Text-Book of Obstetrics. Two vols. By Richard C. Norris, M.D., and Robert L. Dickinson. M.D. Pp. 600. Price 35s. net

The Scientific Press, Ltd. (London).

The Nursing Profession: How and Where to Train. Edited by Sir Henry Burdett, K.C.B. Pp. 373. Price 2s. net.

John Wright and Co. (Bristol).

Our Baby: for Mothers and Nurses. By Mrs. J. Langton Hewer Eighth Edition, revised. Pp. 154. Price 1s. 6d. paper, 2s. 6d. cloth. Pp. 154.

J. Whitaker and Sons, Ltd. (London).

Whitaker's Peerage, 1903; being a Dictionary of Titled Persons Pp. 703.

Whitaker's Almanack, 1903. Pp. 792. Price s. 6d. net.

Medical News.

University of London.

The following three courses of lectures on Advanced Physiology will be delivered in the Physiological Laboratory at the university during the ensuing spring term, commencing on Tuesday, January 20th, at 5 p.m.:—

(*a*) "On the Chemistry of Muscle and Nerve," by W. D. Halliburton, M.D., F.R.S., Professor of Physiology at King's College, on Tuesdays, January 20th, 27th; February 3rd, 10th, 17th 24th; March 3rd, 10th, at 5 p.m.

(*b*) "On the Circulation," by T. G. Brodie, M.D., Lecturer on Physiology at the London School of Medicine for Women, on Thursdays, January 22nd, 29th; February 5th, 12th, 19th, 26th; March 5th, 12th, at 5 p.m.

(*c*) "On the Action of Anæsthetics and Narcotics," by A. D Waller, M D., F R S, Lecturer on Physiology at St. Mary's Hospital. on Fridays, January 23rd, 30th; February 6th, 13th, 20th, 27th; March 6th, 13th, at 5 p.m.

The lectures are addressed to advanced students, and arranged to meet the requirements of candidates for honours in physiology at the university.

The Scholarships and Medals at the B.Sc. Examination, October, 1902, and the M.B. and Examination November, 1902, have been awarded as follows:—

The University Scholarship in Botany – Stafford Edwin Chandler (Royal College of Science and private study).

The University Scholarship in Physiology.—John Molyneux Hamill (Trinity College, Cambridge, and St. Bartholomew's Hospital).

The University Scholarship and a Gold Medal in Medicine.—Robert Pugh Rowlands (Guy's Hospital).

A Gold Medal in Medicine.—Alexander Cameron (Middlesex Hospital).

The University Scholarship and a Gold Medal in Obstetric Medicine. Ernest Rock Carling (Westminster Hospital).

A Gold Medal in Obstetric Medicine.—Lucian Arnold Emmanuel de Zilwa.—(University College and Ecole de Médicine, Paris).

The University Scholarship and a Gold Medal in Forensic Medicine.—Harold Edward Ridewood (London Hospital).

A Gold Medal in Forensic Medicine.—Frank Blenkinsopp Skerrett (St. Thomas' Hospital).

Egyptian Congress of Medicine.

The inaugural ceremony in connection with this Congress, by His Highness the Khedive, took place on December 15th, when Mr. Reginald Harrison, F.R.C.S., as delegate of the Royal College of Surgeons of England and the representative of Great Britain and Ireland, addressing his Highness, offered on behalf of his countrymen engaged in the practice of medicine their most respectful congratulations and thanks on the occasion. It was, he remarked, a matter of regret that Great Britain should not be more fully represented, but at this time of the year many distinguished and well known members of the profession at home have professional duties to perform, which rendered their presence in Egypt impossible. In initiating this Congress and extending to it his personal patronage, the profession were deeply sensible of the desire of his Highness not only to promote the health and prosperity of his own subjects, but to encourage, for the advantage of humanity generally, independent research in that ancient and historical country. On the subject of education Mr. Harrison added that, by the direction of his college, it had been his duty and pleasure to look into the system and methods of medical education and examination employed for enabling young Egyptians and others to learn and to practise medicine and surgery, under diploma in Egypt, and having made himself acquainted from personal observation with the Hospital and School of Medicine in Cairo, where such instruction is, and has been, systematically given, the marked efficiency and progressive character of these institutions had surpassed his anticipations.

Royal Army Medical Corps.

The Secretary of State for India has approved an increase of the pay of officers of the Royal Army Medical Corps serving in India. This increase is in the same ratio as the recent increase in the pay of officers of that corps serving at home. The rates will be as follows:—Lieutenant, Rs.420 *per mensem*; captain, Rs.475; over seven years' service, Rs 530: over ten years' service, Rs.650 Charge allowance: hospital of 300 beds, Rs.240 *per mensem*; hospital of 200 beds, Rs.180; hospital of 100 beds, Rs.120; hospital of 50 beds, Rs.60. Specialist pay at the rate of Rs.60 *per mensem* has also been sanctioned.

Deaths from Chloroform.

A young man succumbed to chloroform narcosis at the Barrow Hospital on the 22nd inst., prior to an operation. No details as to the quantity of chloroform used or the method of administration were elicited, and the stereotyped verdict was returned. A similar catastrophe at St. Bartholomew's Hospital was inquired into on the same day, but in this case the patient, a man, æt. 48, was undergoing removal of the upper jaw for cancer, so that the death may be classed as one of those which happen while under chloroform without any necessary connection with the action of the anæsthetic.

Pass Lists.

University of Cambridge

At the examinations for medical and surgical degrees, Michaelmas term, the following candidates were successful:—

First Examination.

Part I.—Chemistry and Physics: L. T. Baker, Sidney Sussex; M. E. Balston and A. Barker, Trinity; D. C. Bluett, Emmanuel; A. F. Burton, B.A., Christ's; R. S. Carey, Corpus Christi; R. G. Chase and G. G. Collet, Trinity; B. Day, B.A., Caius; M. Donaldson, Trinity; G. W. Dryland, H. L. Duke, T. G. Elger, and H. B. Elton, Caius; E. G. Fearnsides, Trinity Hall; W. J. Fison, Sidney Sussex; P. Hamill, Trinity; A. Hamilton, Christ's; H. A. Harris, Emmanuel: C. B. Heald, Caius; E. H. V. Hodge, Clare; A. F. Jackson, Peterhouse; L. R. King, Pembroke; A. H. Lees, King's; H. M. J. F. de P. P. Leite, Caius; F. H. Lester, Pembroke; C. K. McKerrow, Clare; A. J. May, Sidney Sussex; E. Mellanby, Emmanuel; R. M. Moore, St. John's; E. E. Paget-Tomlinson, Trinity Hall; B. H. Palmer, Pembroke: F. N. Pethick, Trinity; K. Pretty, King's; A. L. Sachs, M.A, Pembroke; K. J. Saunders, Emmanuel; C. F. Searle, Pembroke; S. E. T. Shann, Caius; R. M. Soames, Trinity; A. E. Stansfield, St. John's; A. C. Sturdy, Pembroke; F. H. Teall, Sidney Sussex; A. K. Toulmin-Smith, B.A., Emmanuel; C. H. Treadgold, Clare; G. W. Twigg, Caius; R. P. Varwell, St. John's; P. J. Verrall, Trinity; T. A. Weston, St. John's; C. Whitaker, B.A., Emmanuel; and R. Gregson Williams and P. F. Wilson, Caius.

Part II.—Elementary Biology: C. A. Anderson, Downing; F. W. Argyle, St John's; L. T. Baker, Sidney Sussex; A. Barker, Trinity; W. N. Child and H. N. Coleman, Christ's; J. P. H. Davies and A. P. Denby, Jesus; H. L. Duke and T. G. Elger, Caius; E. G. Fearnsides, Trinity Hall; E. G. Fisher, Emmanuel; W. J. Fison, Sidney Sussex; T. S. Gibson, Emmanuel: P. Hamill and W. Harmens, Trinity; C. B. Herald, Caius; E. H. V. Hodge, Clare; J. W. Horne, B.A., Pembroke; S. W. Howard, Trinity; H. E. Humphrys, Caius; A. F. Jackson, Peterhouse; R. Knowles, Downing; A. H. Lees, King's; L. F. G. Lewis, Christ's; C. K. McKerrow, Clare; A. G. M. Mainwaring, Trinity; W. Mathieson and A. J. May, Sidney Sussex; R. M. Moore, St. John's; J. D. Morgan, B.A., and M. W. B. Oliver, Trinity; K. Pretty, King's; E. L. N. Rhodes, H. Selwyn, K. J. Saunders, Emmanuel; A. E. Stansfeld, St. John's; A. C. Sturdy, Pembroke; F. H. Teall, Sidney Sussex; A. K. Toulmin-Smith, B.A., Emmanuel; W. W. Treve and G. W. Twigg, Caius; R. W. S. Walker and H. P. Weaver, B.A., Trinity; T. A. Weston, St. John's; H. B. Wilson, Pembroke; W. B. Wood, Jesus; and M. M. Woods, Clare.

Third Examination.

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Notices to Correspondents, Short Letters, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *distinctive signature or initials*, and avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," &c. Much confusion will be spared by attention to this rule.

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CLIPPINGS FROM LAY EXCHANGES.

ICELANDIC CANINOPATHY.

"J—— W——, a patient at the Holy Cross Hospital, died yesterday. . . . Dr. —— finally reached the conclusion that the patient's disease was echinococcus peculiar to Iceland, and superinduced by association with dogs."—*Salt Lake* (Utah) *Tribune.*

MISSIONARIES NEEDED IN NEWPORT.

"Dr. —— of ——, Ind., died at 12.5 a.m. last Sunday, May 11th, 1902, in Terre Haute, from effects of a surgical operation for fistula in ano. About nine-tenths of the surgical operations of the present day result in death."—*Newport* (Ind.) *State.*

A. THOMSON.—It was impossible to have made a forecast of the result.

MR. ASHLEY BITTEN.—We cannot give the name of a consultant. The practitioner in attendance should be asked to do so.

B. B.—Our correspondent should return the cheque to the solicitors and state his claim for higher fees.

DEDICATED TO MEDICALS WITH MORE LUCK THAN BRAINS. SOMETIMES MET WITH IN CONSULTATION.

He couldn't pass a catheter,
He couldn't "sound for stone,"
He couldn't "put a fracture up,"
Or set a broken bone.

He couldn't "tap a hydrocele,"
Or bandage up a limb;
He couldn't work the microscope,
It was too much for him.

He couldn't "cup," he couldn't bleed,
And it would make you laugh
To see him try to "draw a tooth,"
Or use the "sphymograph."

In spite of all his ignorance,
His manner is so bland;
He humbugs all the public,
And he drives a four-in-hand.

. . . . .

The moral to be drawn from this
Is very plain to see,
You want no skill with people ill
To make the £ *s. d.*

A. D.

Meetings of the Societies, &c.

LONDON.

THURSDAY, JANUARY 1ST.

ROYAL INSTITUTION OF GREAT BRITAIN (Albemarle Street, W.).—3 p.m. Prof. H. S. Hele-Shaw: On Locomotion, on the Earth, through the Water, in the Air. (Christmas Lectures adapted for Young People.)

RONTGEN SOCIETY (20, Hanover Square, W.).—8.30. Dr. G. M. Lowe (Lincoln): X-Ray Work in Private Practice.

NORTH-EAST LONDON CLINICAL SOCIETY (Tottenham Hospital, N.)—4 p.m. Discussion (opened by Mr. H. Carson).

FRIDAY, JANUARY 2ND.

SOUTH-WEST LONDON MEDICAL SOCIETY (Drill Hall, Clapham Junction, S.W.).—Special Meeting to consider the course to be pursued in the present situation between Mr. Troutbeck, the coroner for the district, and the local practitioners of medicine. All members of the medical profession are invited to be present.

SATURDAY, JANUARY 3RD.

ROYAL INSTITUTION OF GREAT BRITAIN (Albemarle Street, W.).—3 p.m. Prof. H. S. Hele-Shaw: On Locomotion, on the Earth, through the Water, in the Air. (Christmas Lectures adapted for Young People.)

Appointments.

BEESLEY, CLARENCE L.R.C.P., L.R.C.S.Ed., L.F.P.S.Glasg., D.P.H.Cantab., Medical Officer of Health for the Budleigh Salterton Urban District Council.

BUZZARD, E. FARQUHAR, M.D.Oxon. M.C.R.P.Lond., Assistant-Physician to the Royal Free Hospital.

CHICK-LEWIS, JAS. R. G., M.R.C.S., L.S.A.Lond., Medical Officer to the Brading Branch of the Hampshire Friendly Society.

CURTIS, H. J., B.S., M.D.Lond., F.R.C.S.Eng., Surgeon to the North-Eastern Hospital for Children, Hackney Road, N.E.

DUDGEON, LEONARD S., M.R.C.S., M.R.C.P., Pathologist to the East London Hospital for Children and Dispensary for Women.

EMERSON, AMBROSE, M.B., B.C.Cantab., House Physician to the East London Hospital for Children and Dispensary for Women.

FARQUHARSON, J. MALCOLM, M.B., M.R.C.P.Edin., Surgeon in charge of the Throat Department of the Eye, Ear, and Throat Infirmary of Edinburgh.

FRASER, T. P., M.B., Ch.B.Aberd., House Surgeon at Grimsby Hospital.

GORDON, J. LESLIE M.B., C.M., Senior Assistant-Medical Officer to the Metropolitan Asylums Board Asylum at Tooting Bec, London.

PEARSON, S. VERE, M.B.Cantab., M.R.C.P.Lond., Assistant-Physician to the East London Hospital for Children and Dispensary for Women.

POLLARD, CHARLES, F.R.C.S.Eng., Honorary Surgeon to the Worcester General Infirmary.

RIVIERE, CLIVE M.D.Lond., M.R.C.P.Lond., Assistant-Physician to the East London Hospital for Children and Dispensary for Women.

ROWLANDS, R. P., F.R.C.S.Eng., Assistant-Surgeon to the East London Hospital for Children and Dispensary for Women.

VERLING-BROWN, C. R., M.R.C.S., L.R.C.P.Lond., Senior House Physician to the Great Northern Hospital, Holloway Road, N.

WALKER, T. MALCOLM, M.R.C.S., L.R.C.P.Lond., Medical Officer of Health to the Banbury Rural District Council.

Vacancies.

Birkenhead Borough Hospital. — Senior Resident Male House Surgeon. Salary £100 per annum, with board. Applications to Chairman, Weekly Board.

Canterbury Borough Asylum.—Assistant Medical Officer. Salary £120 per annum, with furnished apartments, board and laundry. Applications, three recent testimonials, to be sent to the Medical Superintendent, Borough Asylum, Canterbury, on or before 10 a.m., January 7th, 1903. Henry Fielding, Town Clerk, Town Clerk's Office, Canterbury.

Carlow Union.—Assistant Nurse. Salary £20 per annum. Applications to the Presiding Chairman by the 2nd prox. (See Advt.)

Dewsbury and District General Infirmary. — House Surgeon. Salary £100 per annum, with board, residence, and washing. Applications to Charles Abbs, Secretary, Infirmary, Dewsbury.

Liverpool Royal Infirmary.—Assistant Honorary Surgeon. Applications to Edward Kewley, Chairman

Nottingham General Hospital.—Assistant House Surgeon. Salary £100, with board, lodging, and washing in the Hospital. Applications to the Secretary.

Notts County Asylum, Radcliffe-on-Trent.—Assistant Medical Officer. Salary £130. Applications to the Medical Superintendent.

Palmer Memorial Hospital, Jarrow-on-Tyne.—House Surgeon. Salary £120 per annum, with board and residence. Applications to the Secretary.

Southport Infirmary.—Resident Junior House and Visiting Surgeon. Salary £70 per annum, with residence, board, and washing. Applications to "The Secretary, Infirmary Office, 24, King's Street, Southport."

St. Bartholomew's Hospital.—Assistant Physician (Hon.) and Assistant Surgeon (Hon.). Applications to Wm. Henry Cross, Clerk.

The Cancer Hospital (Free). Fulham Road, S.W.—Junior House-Surgeon. Salary £70 per annum, with board and residence. Applications to the Secretary.

Births.

ADDISON.—On Sunday, Dec. 21st, at Wiean Croft, Northwood, Middlesex, the wife of Christopher Addison, M.D., F.R.C.S., of a daughter.

ARMOUR.—On Dec. 22nd, at 3, Bentinck Mansions, Bentinck Street, W., the wife of Donald John Armour, M.B., F.R.C.S., of a daughter.

Marriages.

ALPIN—STODDART.—On Nov. 13th, at Mussooree, India, by special licence, Major W. Alpin, M.D., M.R.C.S., L.R.C.P., Indian Medical Service, to Helen May, eldest daughter of Colonel C. H. Stoddart, I.S.C., of Guernsey.

JONES—WATSON.—On Dec. 22nd, at St. Barnabas's Church, Marylebone, by the Rev. C. Evelyn Prescott, M.A., Herbert C. W. Jones, M.A., M.B.Cantab., eldest son of W. Jones, F.S.A., Dawlish, to Harriet Eaton, widow of the late James R. Watson, and daughter of the late C. Platt Williams, of New York.

RANDELL—ROCHE.—On Dec. 22nd, at St. John's Church, East London, Cape Colony, Henry St. John Randall, M.B., B.Ch.Edin., to Alice Mildred, daughter of the late Charles Bennett Roche, of Daventry.

Deaths.

HEATH.—On Dec. 20th, at his residence, 29, Warrior Square, St. Leonards-on-Sea, Richard Heath, M.D., R.U.I., M.Ch.

LETT.—On Dec. 19th, at Cliff Parade, Wakefield, Richard Alfred Lett, M.D.Dub., aged 55, only son of the late Richard Lett, M.D., of Ballyrane, co. Wexford, Ireland.

RUST.—On Dec. 24th, Thomas Parker Rust, M.R.C.S., L.S.A., aged 77, of Wells, Norfolk, after many years of suffering.

WHITMARSH.—On Dec. 22nd, at 7, St. Michael's Place, Brighton, Harriet Jewell, widow of William Michael Heaviside Whitmarsh, M.D., late of West Brighton.

WOOD.—On Dec. 21st, at Daventry, Charles Edward, eldest son of the late Robert Henton Wood, F.R.C.S., of St. Martin's, Leicester, aged 41.

ZERFFI.—On Dec. 24th, at Headingley, Leeds, Josephine, widow of the late Gustavus George Zerffi, Ph.D., aged 73.

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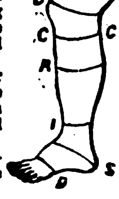

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This Product, which is a chemical combination of Formalin Gelatine and forms a self-applying Antiseptic Bandage in THE TREATMENT OF WOUNDS, permits a continuous and penetrating disinfection of the surrounding tissues, without damage to the vitality or compensating power of the healthy body cells, thus favouring a speedy healing process.

GLUTOL (Schleich) is sold by all Chemists in 1 oz., 4 oz., and 1 lb. Tins.

With the label of the Chemische Fabrik auf Aktien v. E. SCHERING.

SOLE WHOLESALE AGENTS:

The Formalin Hygienic Company, Limited,

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To whom all inquiries as to Literature, &c., should be addressed.

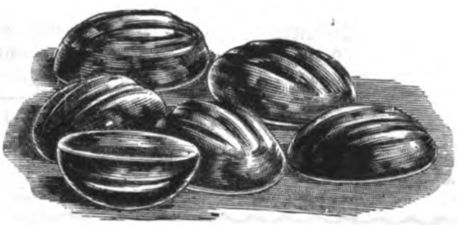
The "Allenburys"

Throat Pastilles.

SOFT. DEMULCENT. PALATABLE.

IN the medical treatment of most Throat Affections a simple and effective method of local application is a necessity. The exigencies of modern practice demand the employment of a large variety of drugs in a soothing and demulcent form.

THE Basis of the "ALLENBURYS" THROAT PASTILLES is composed of a special Pâte de Jujube which is soothing and palatable, while the local action of the drug incorporated, is made more certain by the slow rate of solution of the jujube in the saliva, than is the case with ordinary Lozenge or Pastille.



The following Pastilles are largely used, and have been found from long practical experience to be very efficacious :—

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No. 9. **Menthol, Cocaine, and Red Gum.**
Menthol, gr. 1/20th. Cocaine, gr. 1/20th. Red Gum, 2 grs.

No. 23. **Eucalyptus and Red Gum.**
Eucalyptus, ½ minim of the Oil. Red Gum, gr. i.

No. 28. **Compound Guaiacum.**
Guaiacum, gr. i. Chlorate of Potash, gr. ii. Red Gum, gr. ¾.

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Extract of Rhatany, gr. ii. Cocaine Hydrochl., gr. 1/20th

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Chlorate of Potash, gr. ii. Borax, gr. i. Cocaine, gr. 1/20th.

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Menthol, gr. 1/20th. Eucalyptus Oil, min. i.

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1/- box of any variety, with detailed list, free to Medical Men in Gt. Britain.

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AN ENERGETIC BLOOD FORMER, rich in organically combined iron, it has no equal as a nourishing and strengthening food for children and adults suffering from debility of any kind.

HOMMEL'S HÆMATOGEN contains:

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Infants - Take Half a Teaspoonful, or One Teaspoonful, twice a day in milk.
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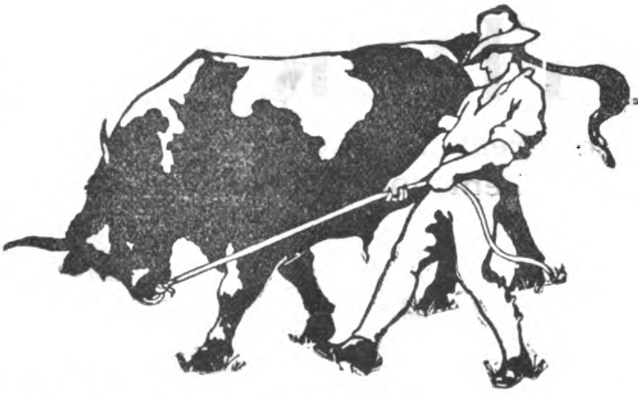

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Established 1865.
Contractors to Hospitals, Infirmaries, Nursing Institutions,
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Factories: FRAY BENTOS, URUGUAY.

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The Company are the Sole Manufacturers of these two preparations:

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THE IDEAL NERVE CALMANT.

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DOSE:—FOR ACUTE NERVOUSNESS from Excitement, Fevers, Menstrual Periods, Colds, La Grippe, Childbirth, &c., one teaspoonful every hour, or, in bad cases, every half-hour until improvement; then four times a day.
CHRONIC NERVOUSNESS from Uterine Diseases, Menopause, &c., teaspoonful four times a day.
TEETHING CHILDREN, ten to thirty drops as often as may be indicated.

8 oz. Bottle, 4s. 6d. Retail. Usual Discount to Profession.

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PEPSINA LIQUIDA
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One Teaspoonful will Peptonise 1,000 grains of Albumen.

The LANCET reports: "The preparation is decidedly elegant, and possesses great therapeutic powers."

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In 4 oz., 8 oz., and 16 oz. bottles, of every Wholesale House,

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THREE STAR

BRANDY.

"The Medical Press," 2nd August, 1899, says:—

"We have carefully examined a sample of this well-known spirit by the usual tests, and the results obtained by analysis fully warrant our recommending it for medical and dietetic purposes. The analysis gave the following figures:—

Alcohol (as proof spirit)	86·5 per cent.
Extractives	·68 „ „
Ash	Nil.
Acidity	·036 „ „
Ethers (as alcohol)	·028 „ „

"We analysed this product some ten or more years ago, and finding that it still maintains its exceptionally high character, we are consequently in a position to speak highly of it as a genuine old brandy made from wine, well matured, and free from all compounds which might detract from its value as a medicinal agent."

PURE WATER.

The Pasteur Chamberland Filter

"No other affords reliable protection." — Medical Times

Was awarded the only Grand Prix, Paris, 1900.

The demonstrated standard of efficient filtration." — BRITISH MEDICAL JOURNAL. "A real preventative of typhoid fever."—THE LANCET.

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SPRAYERS—Disinfect with certainty. Exclusively used by the Municipality of Paris. Save Time and Expense.

Particulars of other appliances on application.

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TRADE MARK.

PRODUCTS.

The use of freshly prepared antiseptic, anæsthetic or astringent solutions is a feature of modern medical and surgical practice. 'SOLOID' PRODUCTS made it a possibility. They contain accurate quantities of active ingredients, and are compact and portable.

'SOLOID' CARBOLIC ACID. The melting point of the pure, crystallised phenol used in this preparation is 104° F. (40° C.)

Supplied to the medical profession, as follows: gr. 5, tubes of 25, 5d.; gr. 20, tubes of 12, 6d.; gr. 60, tubes of 6, 7d per tube.

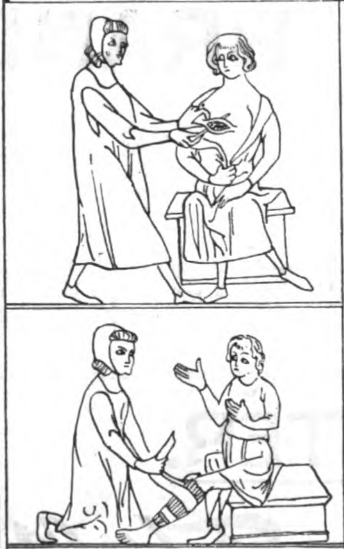
'SOLOID' MERCURIC POTASSIUM IODIDE. (*Formerly known as* IODIC-HYDRARG.) Permits the preparation of fresh solutions possessing the powerful antiseptic properties of mercuric biniodide.

Supplied to the medical profession, in bottles of 25 and 100, gr. 1, 6d. and 1/2; and gr. 8.75, 1/6 and 5/- per bottle.

AVOID IMITATIONS.

BURROUGHS WELLCOME & CO.

LONDON, SYDNEY AND CAPE TOWN.



A guild of surgeons, distinct from the guild of barbers, existed in London from a very early period The earliest mention of it appears in 1369. About this period all external wounds and injuries were attended to by the surgeons, while the treatment of internal diseases became the exclusive province of the priest physicians. The above drawings from an early MS. show an operation being performed on the breast, and the application of splints to a fractured leg.

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ROMAN SERIES—7

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The addition of the word '*KEPLER*' eliminates the element of doubt.

It secures the use of the best malt extract that is made.

Having prescribed 'KEPLER' MALT EXTRACT, it is necessary to see that the patient gets 'KEPLER' MALT EXTRACT. There are imitations.

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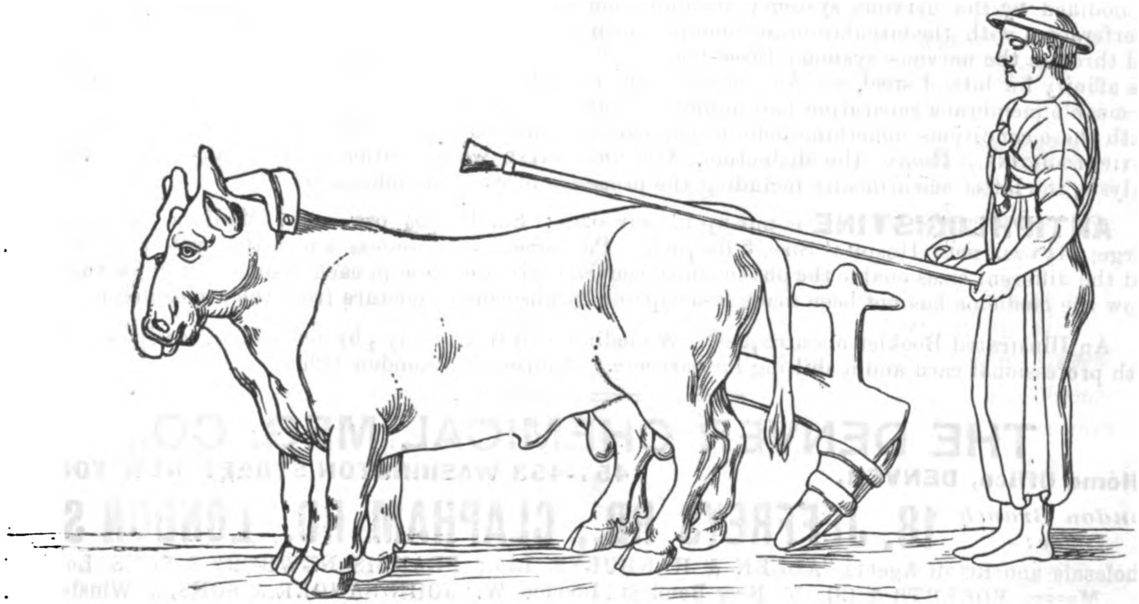

4

The Roman husbandman was thus adjured by an antient poet—

"E'v'n in this early dawning of the year, Produce the plough, and yoke the sturdy steer,
And goad him till he groans beneath his toil, Till the bright share is buried in the soil."

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HYGROSCOPIC
ANTISEPTIC

EXOSMOTIC
ENDOSMOTIC

ANTIPHLOGISTINE

Is an external application for inflammation and congestion. It is a perfectly harmless, soft and pliable, non-irritating, non-toxic, soothing, and antiseptic poultice and surgical dressing always ready for immediate use, possessing hygroscopic, nutrient, exosmotic, endosmotic, and indirectly anodyne and hypnotic properties, and is acknowledged by most of the physicians in the United States, where it has been used extensively for the past ten years, to be the very best local treatment for

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INFLAMED GLANDS
SPRAINS
BRUISES
BOILS
BRONCHITIS
ERYSIPELAS
PERIOSTITIS
SYNOVITIS
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CHRONIC ULCERS

And for all other cases where INFLAMMATION or CONGESTION is present and a local medicine is indicated.

ANTIPHLOGISTINE is composed of chemically pure glycerine, boric acid, salicylic acid, iron carbonate, peppermint, gaultheria, eucalyptus, and iodine, combined with the base, dehydrated silicate of alumina and magnesia.

Directions.—Warm, then spread about an eighth of an inch (the thicker the better) on the skin over the inflamed part and cover with cotton or heavy cloth. It is sometimes more convenient, especially where the part to be dressed is sensitive, to first spread on cloth, then apply gently. In from 12 to 36 hours it will peel off nicely, like the peel from a banana. Much depends upon properly applying. In mild bronchial affections the chest only need be dressed; in inflammation of the bowels the entire abdomen should be covered; in affections of the joints it should be applied about the joint and several inches above and below; in leg ulcers the indurated and swollen tissues should be covered, and in double pneumonia the entire thoracic walls.

SCIENTIFIC, not EMPIRICAL.—Antiphlogistine was built up or created to meet and scientifically counteract the essential abnormal conditions present in all forms of inflammation. The theory of its action is based largely upon these truths. The food supply of each and every cell of which the body is made is the blood; the vascular system constitutes the highways upon which or through which the food is carried or delivered to each cell, and the functions of this system are presided over, controlled or modified by the nervous system; inflammation means certain definite successional deviations or interferences with the circulation in some part or parts; Antiphlogistine acts upon the vascular system and through the nervous system; three-fourths of the weight of the body is blood-water; as a magnet has affinity for bits of steel, so Antiphlogistine has affinity for water; the skin may be regarded as a permeable membrane separating two liquids of different densities—the blood and the Antiphlogistine. With these conditions something definite happens—an interchange of fluids, most marked towards the Antiphlogistine. Hence, the deduction, Antiphlogistine works through reflex action and through dialysis, the latter scientifically including the processes of ex- and endosmosis.

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Contains
a Concentrated Preparation of
Fresh Eggs
combined with
Extract of Malt.

'MALTOVA'
a most concentrated and highly nutritive combination of the natural proteids of egg—viz., Albumin, Vitellin, Lecithin, and Nuclein, besides the various salts and elements necessary for building up the human frame.

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PREPARED IN VACUO

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'MALTOVA'
can be safely taken when other foods cannot be given.

INVALUABLE as a FOOD in all Fever Cases.

Used with any Farinaceous Food it ensures rapid digestion.

THE LANCET, MAY 24, 1902, says:—' The combination of an active malt extract with raw eggs is an excellent idea. Such a preparation is calculated to contain all classes of material suited for the repair of the body waste. Moreover, the combination, of course, contains lecithin, that curious phosphorised principle of nerve substance, brain, &c. That '**Maltova**' is a genuine preparation is obvious from the facts: (1) that it readily transforms starch into sugar, and (2) that it yields a coagulum of albumin on boil-
The preparation is one of undoubted merit, and may be justly reckoned as belonging to the class of specially nutritious foods.

Price 1s. 6d. per 8 oz. bottle, from all Chemists and Druggists, or 1s. 9d. post free,
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Samples and fuller particulars, with Analysts' Reports, &c., gladly sent on application to the Company.

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May be obtained of all Grocers and Wine Merchants.

Manufacturers, BEWLEY & DRAPER, Limited, DUBLIN.

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REMEDY—PAR EXCELLENCE—

in Anæmia, Neurasthenia, Bronchitis, and Influenza, and during Convalescence from exhausting diseases.

It contains—Hypophosphites of Iron, Quinine, Strychnine, Lime, Manganese, and Potash. Each fluid drachm contains the equivalent of 1-64th grain of pure Strychnine.

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is a special preparation, quite distinct from ordinary Bovril, and more highly concentrated. It is

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and consequently acceptable to the most fastidious palate. For patients who object to Bovril on account of its salt flavour, Doctors might order INVALID BOVRIL, which can be obtained from any Chemist.

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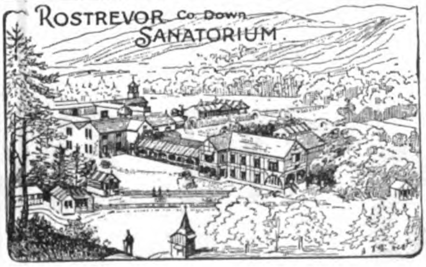

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As Hospitals for the Medical Care and Treatment of Patients of the Upper and Middle Classes suffering from

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Voluntary Patients admitted without Medical Certificates.

Relatives of Patients who desire to reside with Patients can do so.

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(Voluntary Boarders and Inebriates admitted). This establishment has lately undergone many structural alterations and improvements, and the walks and grounds are extensive and picturesque.

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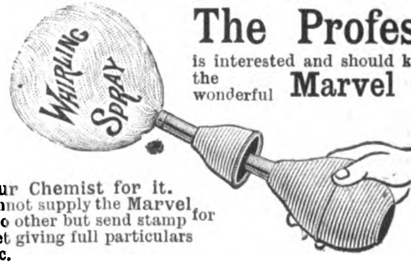

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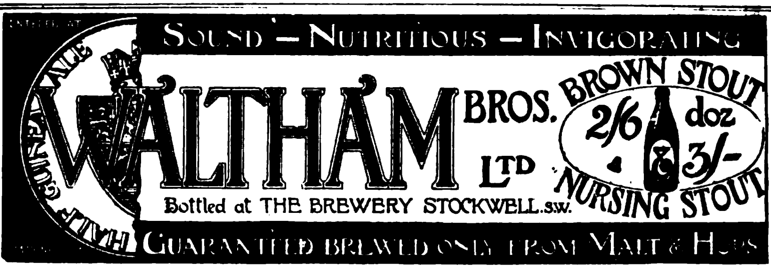
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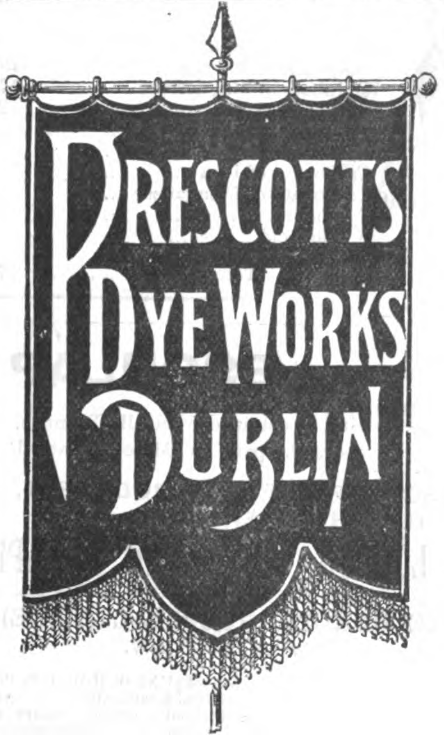

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Sulphate of Ammonia	0·061
Sulphate of Sodium	139·063
Sulphate of Magnesium	172·805
Sulphate of Calcium	20·788
Chloride of Sodium	29·047
Carbonate of Sodium	9·989
Carbonate of Iron	0·097
Carbonate of Manganese	0·429
Alumina	0·349
Silicic Acid	0·092
Total	372·824

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Regulations and Entry Forms may be obtained on application to the Secretary of the College of Preceptors, Bloomsbury Square, W.C.

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The Competition for the Prize is open to all Students of the various Schools of Medicine in Dublin which are recognised by the Medical Licensing Bodies in Ireland, and also to Graduates or Licentiates of these Bodies of not more than three years' standing at the time of the award.

The Prize, value £25, will be awarded to the writer of the best Essay, on a subject to be selected by the Candidate, evidencing original research in Animal Physiology or Pathology; the Essay to be illustrated by drawings or preparations.

The Essays, bearing fictitious signatures, are to be lodged with the Registrar of the Royal College of Physicians of Ireland, Kildare Street, Dublin, on or before June 1st, 1903.

JAMES CRAIG, M.D., Univ. Dubl.,
Fellow and Registrar, R.C.P.I.

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(By Order), JOHN GEO. GLOVER,
Clerk of the Union.

Workhouse, Carlow, 18th December, 1902.

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